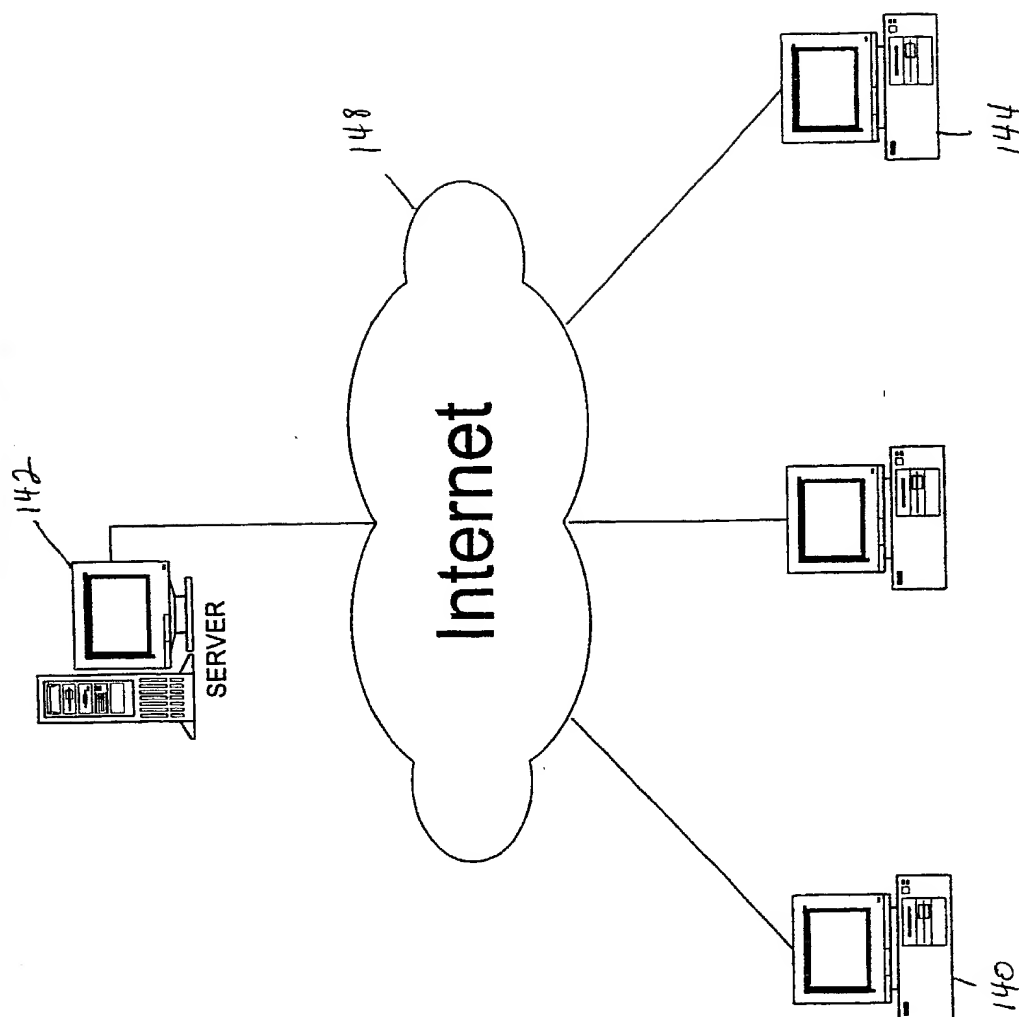


Fig. 1



**Fig. 2**

Recipient Permissions
Notification To Server

Recipient

May

May Not

Alter the Document

Recipient

May Not

Save Document Locally

☒ Applink May Be Accessed 3 Times Only

☒ Applink Access Will Require This Password

This Password Can Be Accessed 7 Times

☒ Applink Will Expire On

☐ Allow Downloading Of Document

Cancel
OK
Edit Recipient Web Page

FIG. 3

Figure 3b

150

### Applink Properties

Business Plan doc Applink #3      Applink name You may want to rename the Applink to something meaningful if you receive email notice of its use

☒ This Applink is Active  
☐ This Applink is Inactive Check to Activate.

URL:

### Access Permissions

156 — ☒ Full: Recipient can download the file  
☐ Limited Recipient cannot download the file

Note: If recipient is behind a firewall, port 3144 must be open. If it is not, recipient will have no way to access the file, unless given the ability to download the file through "Full" permissions

153 — ☐ Access will require a password  158

Note: Password should be sent separately to the intended recipient

Number of Accesses: ☒ Unlimited  
 155 — ☐ Limited to this number of total accesses:

### Duration

154 — ☒ Unlimited  
☐ From Day  Month  Year   
 Until: Day  Month  Year

### Notification of Use

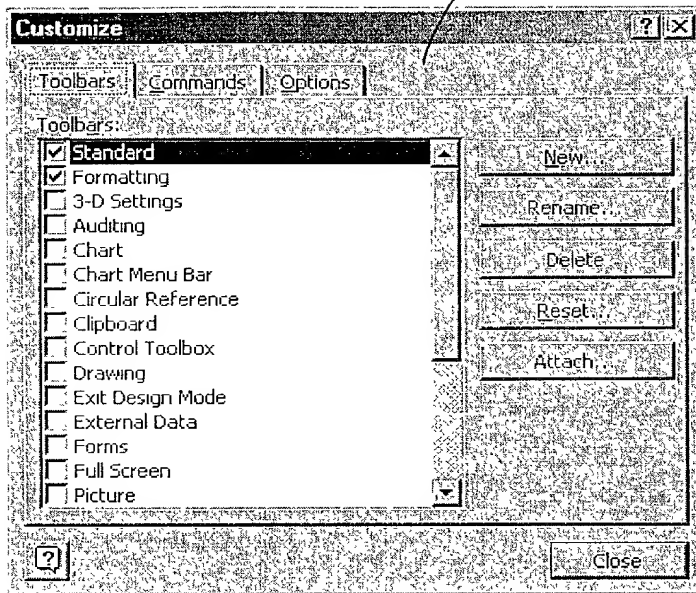
When the Applink is accessed, send me an email notification

☒ Yes  
☐ No

### Recipient's Web Page

The recipient will view an introductory web page before accessing this Applink. The page will include

☒ Document Details      Comments to include in the recipient's web page  
☒ Sender's Name  
☒ Sender's Email



PRIOR ART

Application Interface Customization

Fig 3c

180

**Book1 Properties** [?] [X]

General | Summary | Statistics | Contents | Custom

Title:

Subject:

Author: James L. Rice

Manager:

Company: FreeDesk

Category:

Keywords:

Comments:

Hyperlink base:

Template:

☐ Save preview picture

Ok Cancel

PRIOR ART

Example of existing Windows File Metadata

Fig 3D

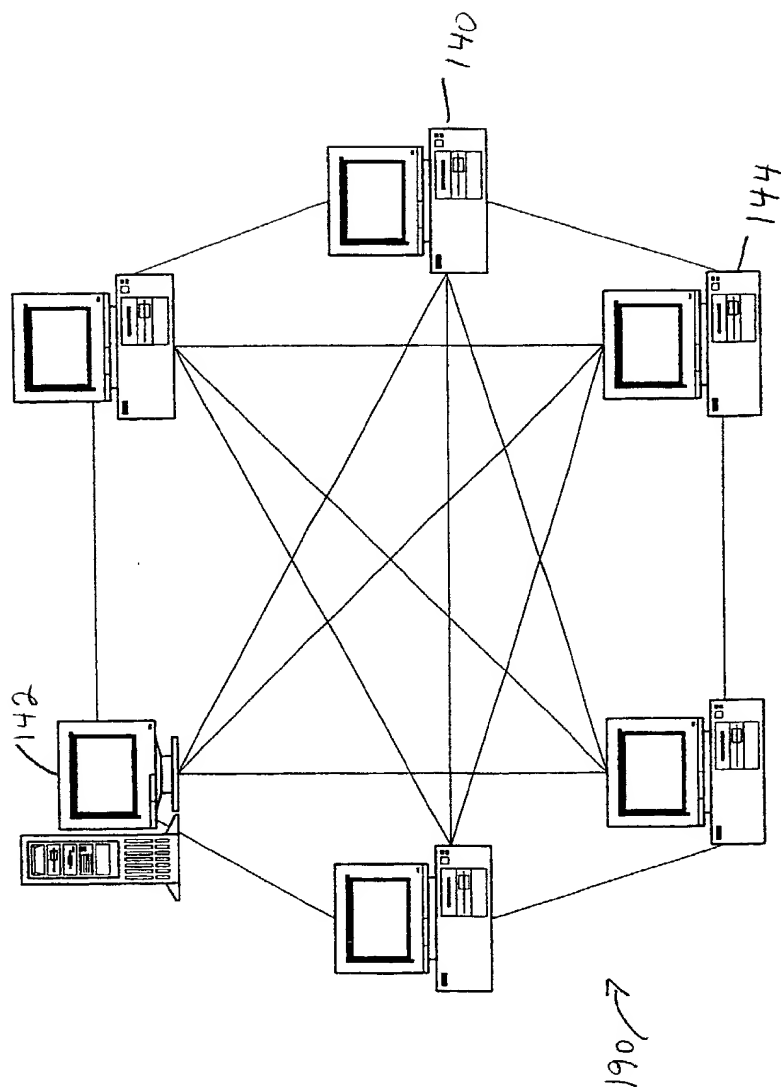


Fig. 4

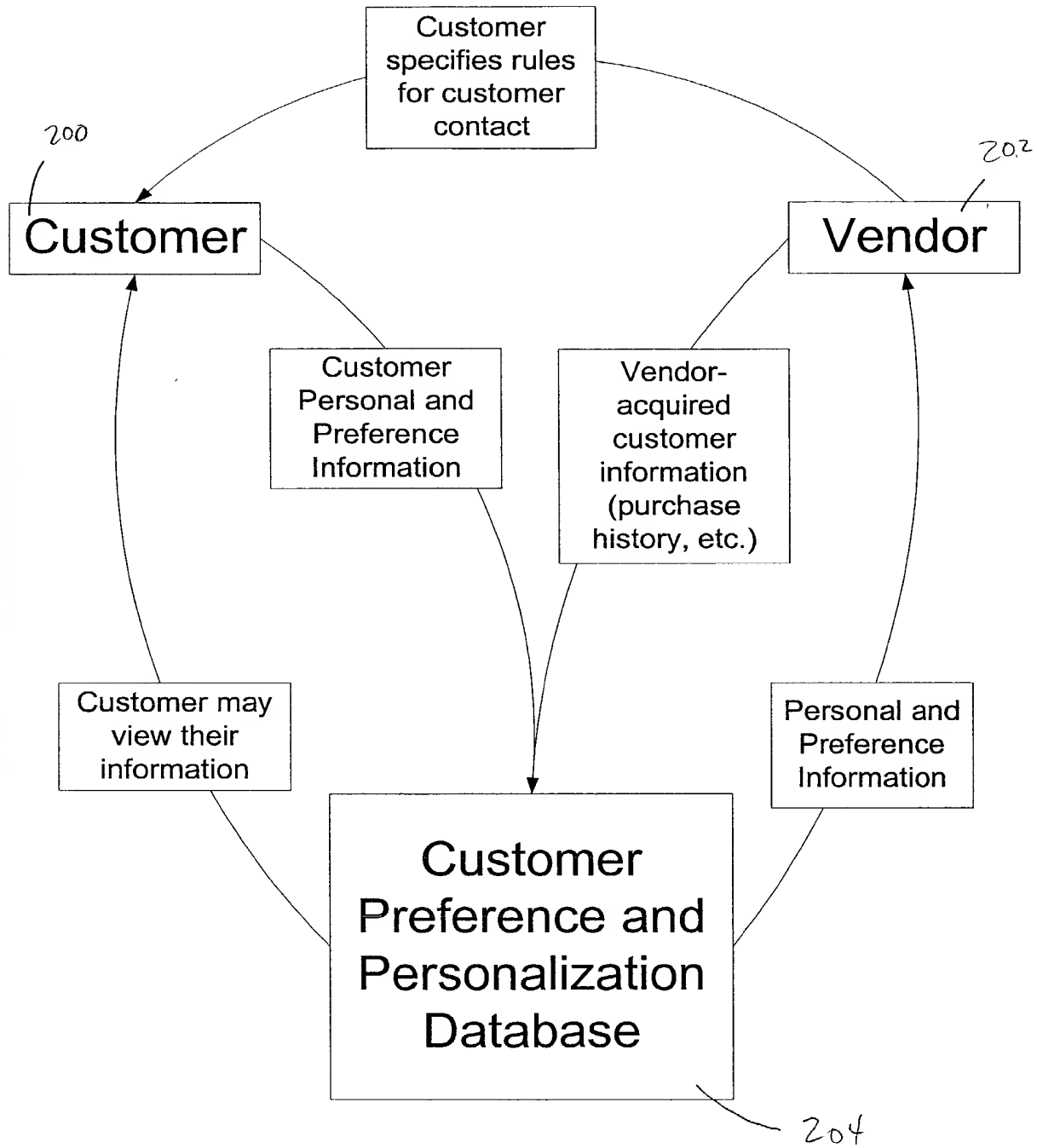


Fig 4B

Customer Preference and Personalization Database



This is an Applink to this Document

Document Name: Business Plan  
 Document Type: Word 95 Document  
 Size: 3MB  
 Pages: 37

DOC Details  
 Sender: Joe User  
 To Access, Enter Password:

This Document is read-only. You will not be able to change it, only view it.  
 You will not be able to save it to your PC  
 This is good for 5 total accesses.

Preview

You may either download the document and open it with a program on your computer, or open it in a web-based application.

Clicking on the "Open" button will cause a small certified Java client to download. The document will then open inside a web-based application.

DOWNLOAD OPEN

JOIN [PORTAL] AND SEND YOUR OWN "APPLINKS"

Problems? Email us at: Webmaster@domain.com

FIG. 5

210

FREEDESK.COM

AppLink

216

**Sender Details**

Sender: Jim Rice  
Telephone Number: 933-  
Email: jim@freedesk.com

**Document Details**

214 Document Name: Business Plan  
Document Type: Word 95  
Size: 3.2 MB

218

**Permissions**

This document is read-only. You will not be able to change it, only view it.

You will not be able to print it.

**Password**

220

Please enter password to access this document:

**Survey**

The following survey is optional:

Company:

Email:

**Comments**

This is the FreeDesk business plan. The financial section is not yet complete. We need input from Brian about projected sales for 2003.

**What is an AppLink?**

When you click on the "Open AppLink" button, below, a signed (meaning no virus danger) client Java program will download itself. The document will then appear inside an application window. You do not need any programs on your computer. You will need firewall port 3144 open. For further technical details, click on [Technical Requirements](#).

**FreeDesk NonDisclosure Agreement**

You agree as a condition of viewing this document that you will not disclose any of its contents to any third party. You agree to not transmit this AppLink URL to any third party.

This does not apply to knowledge known to you prior to this time.

☒ Decline ☐ Accept Name:

**Submit Form and Open AppLink to "Business Plan"**

228

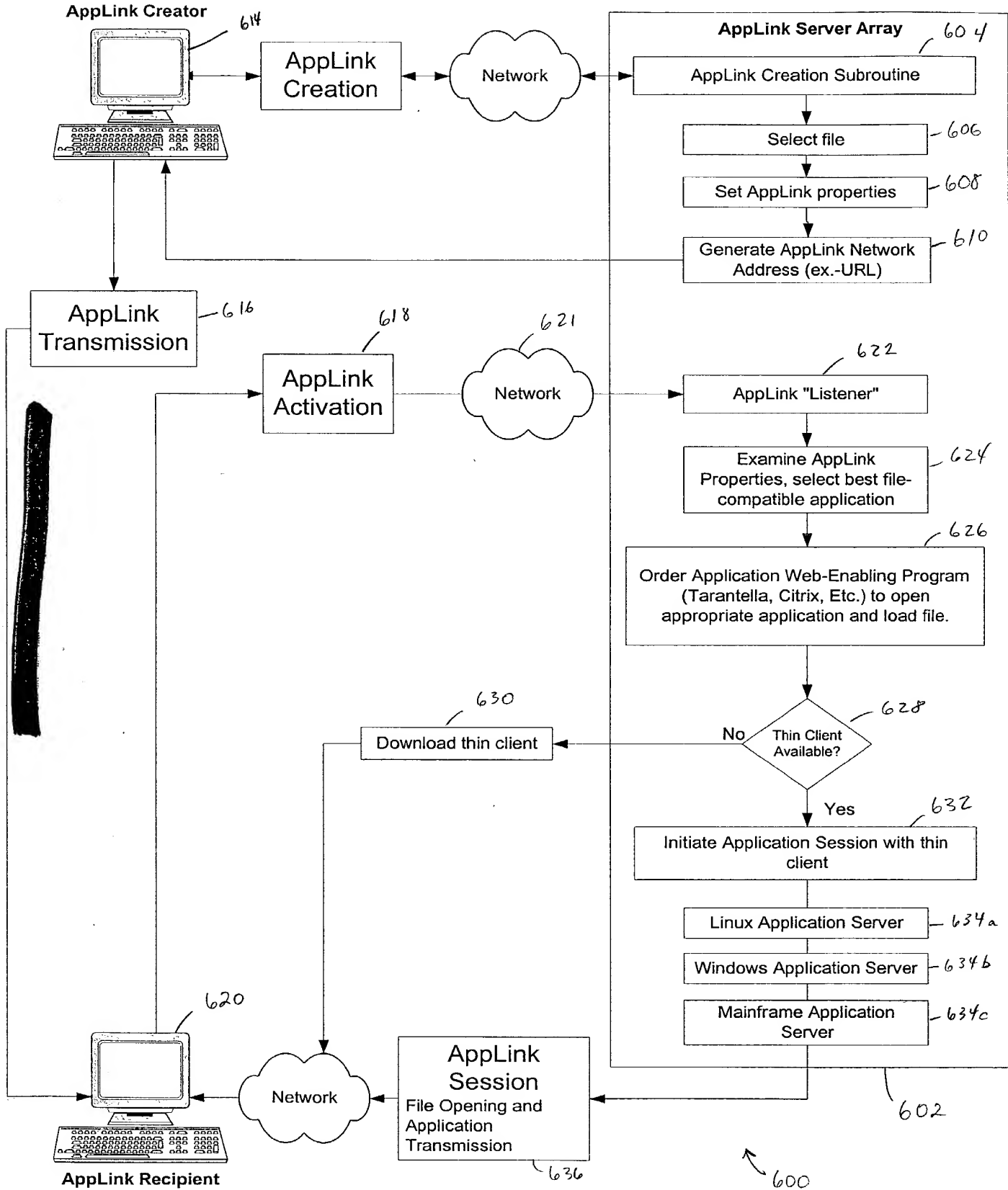
**Download File**

230

**Join FreeDesk and send your own AppLinks**

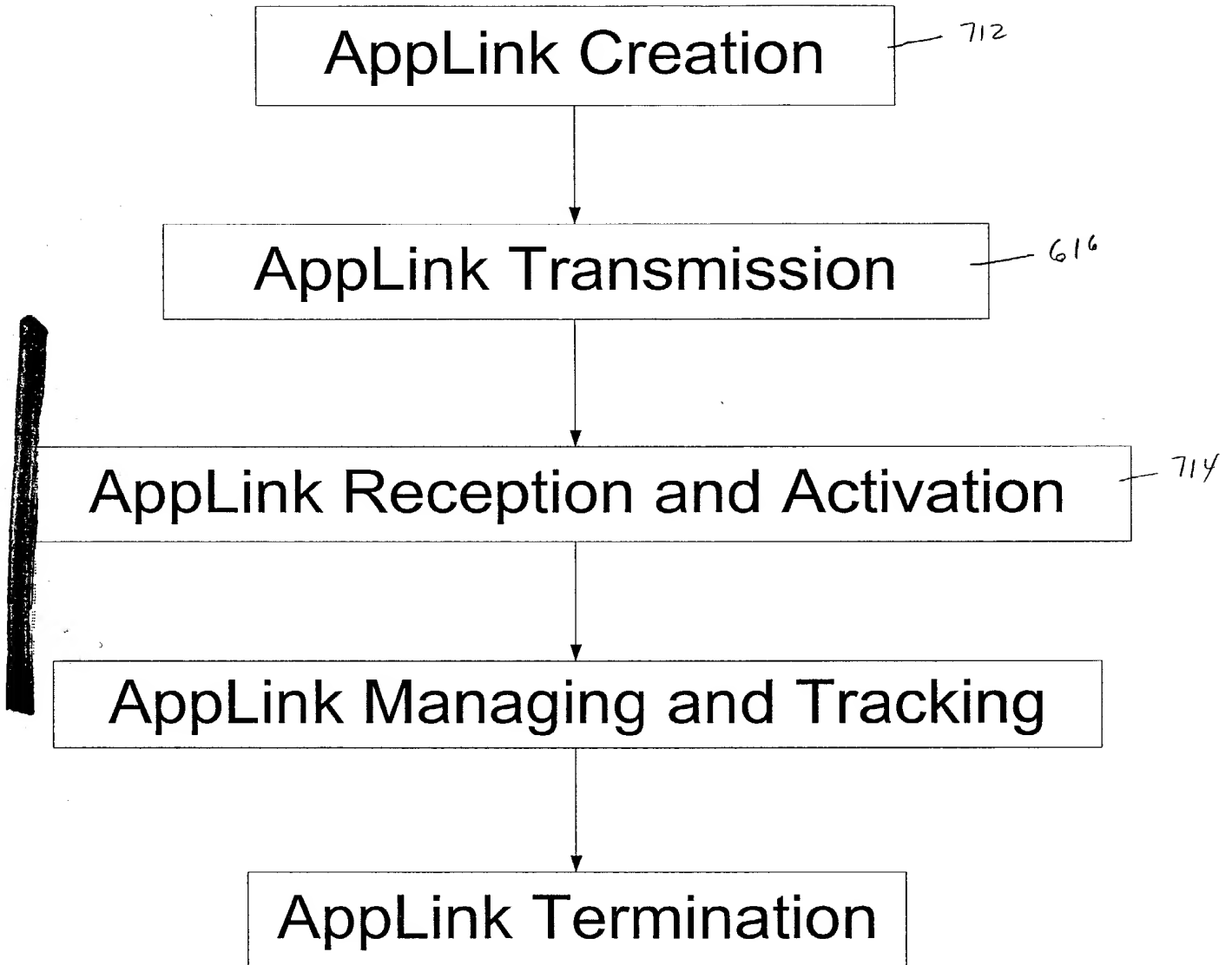
Fig 5B

AppLink Recipient Web Page: Viral Marketing, Password, NDA, Survey, Download option, Document Details, Sender Details



## AppLink Schematic

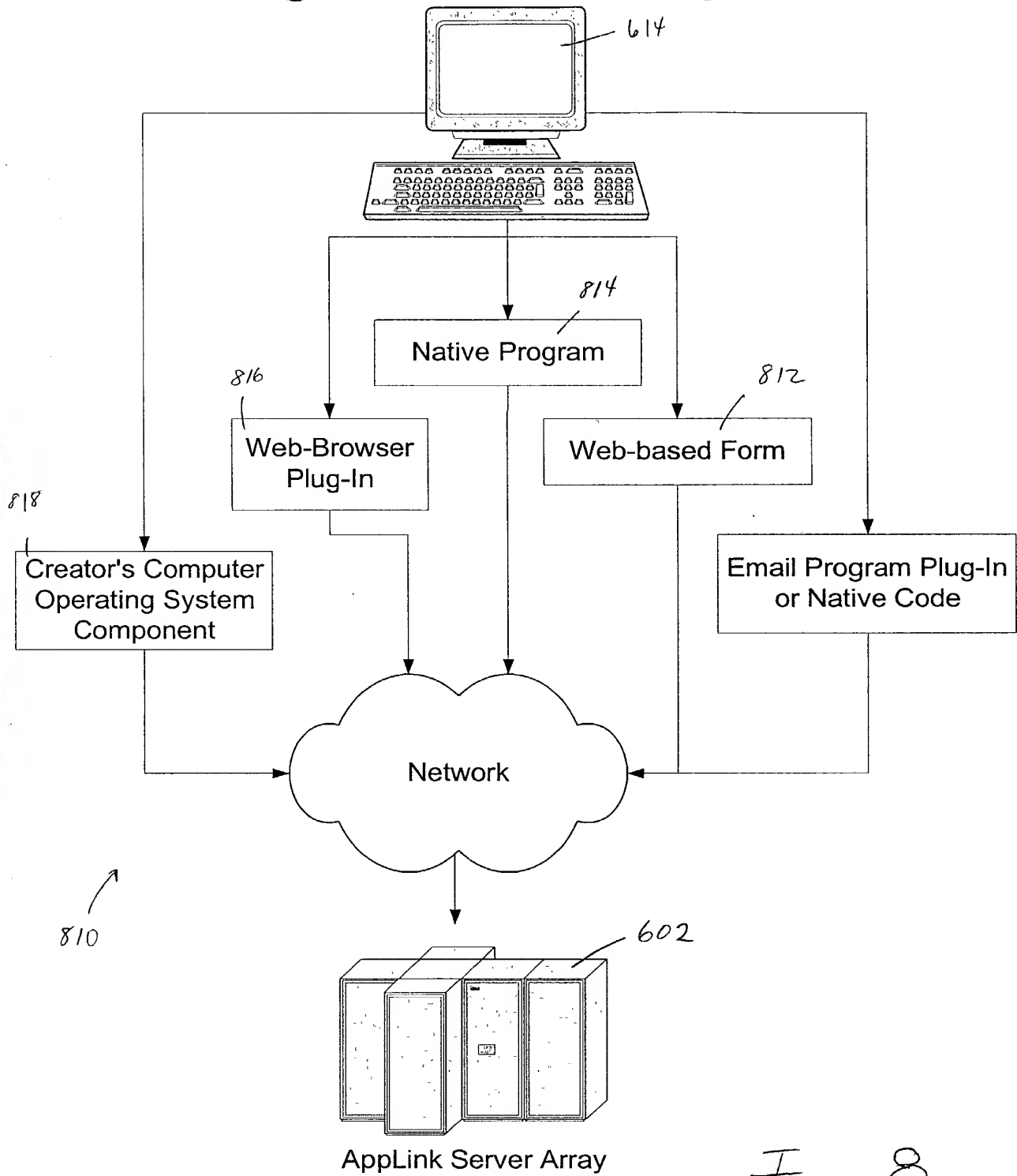
Fig 6



710

Fig 7  
AppLink Life Cycle

## AppLink Creator



AppLink Creation Methods

Fig 8

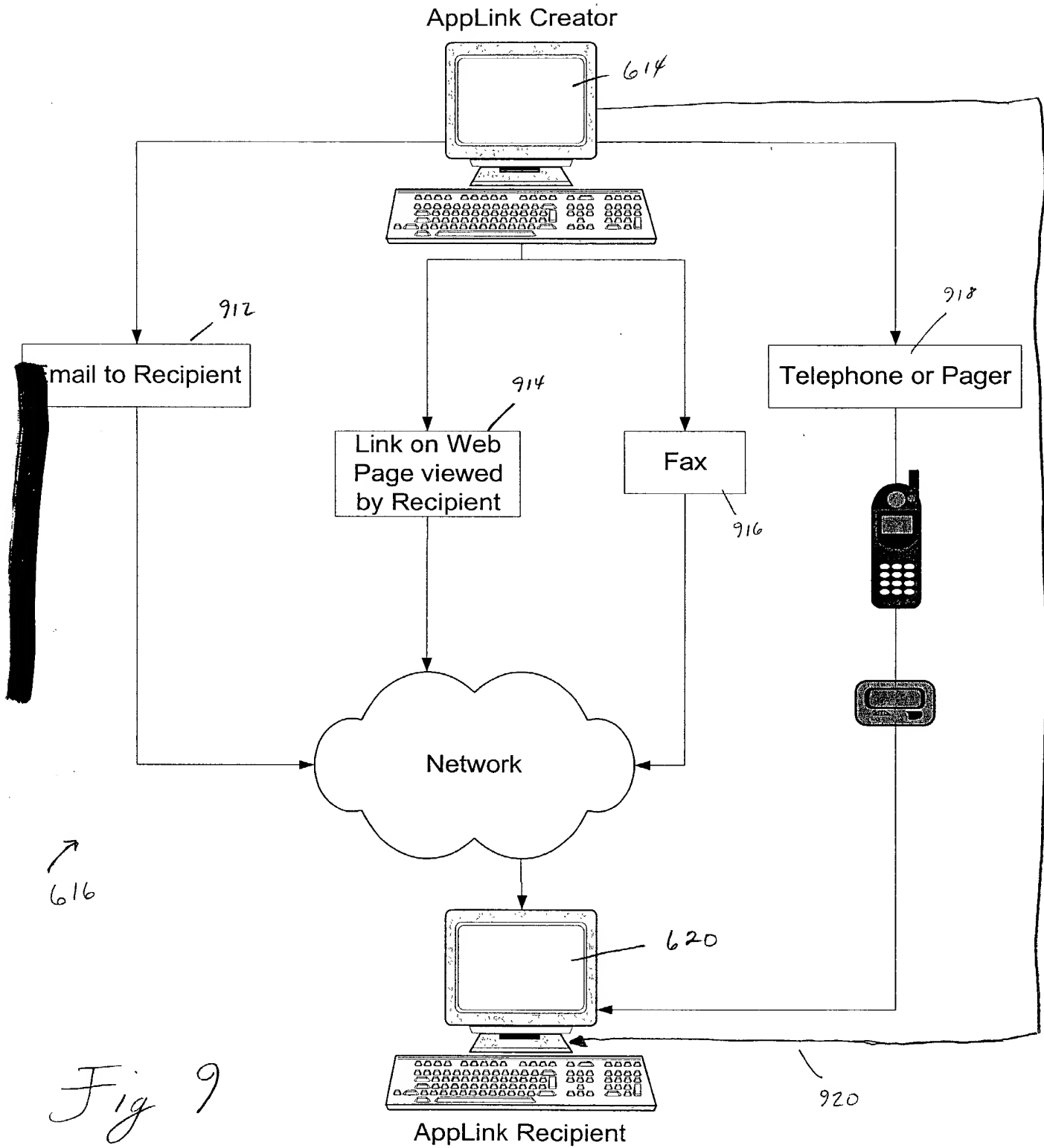
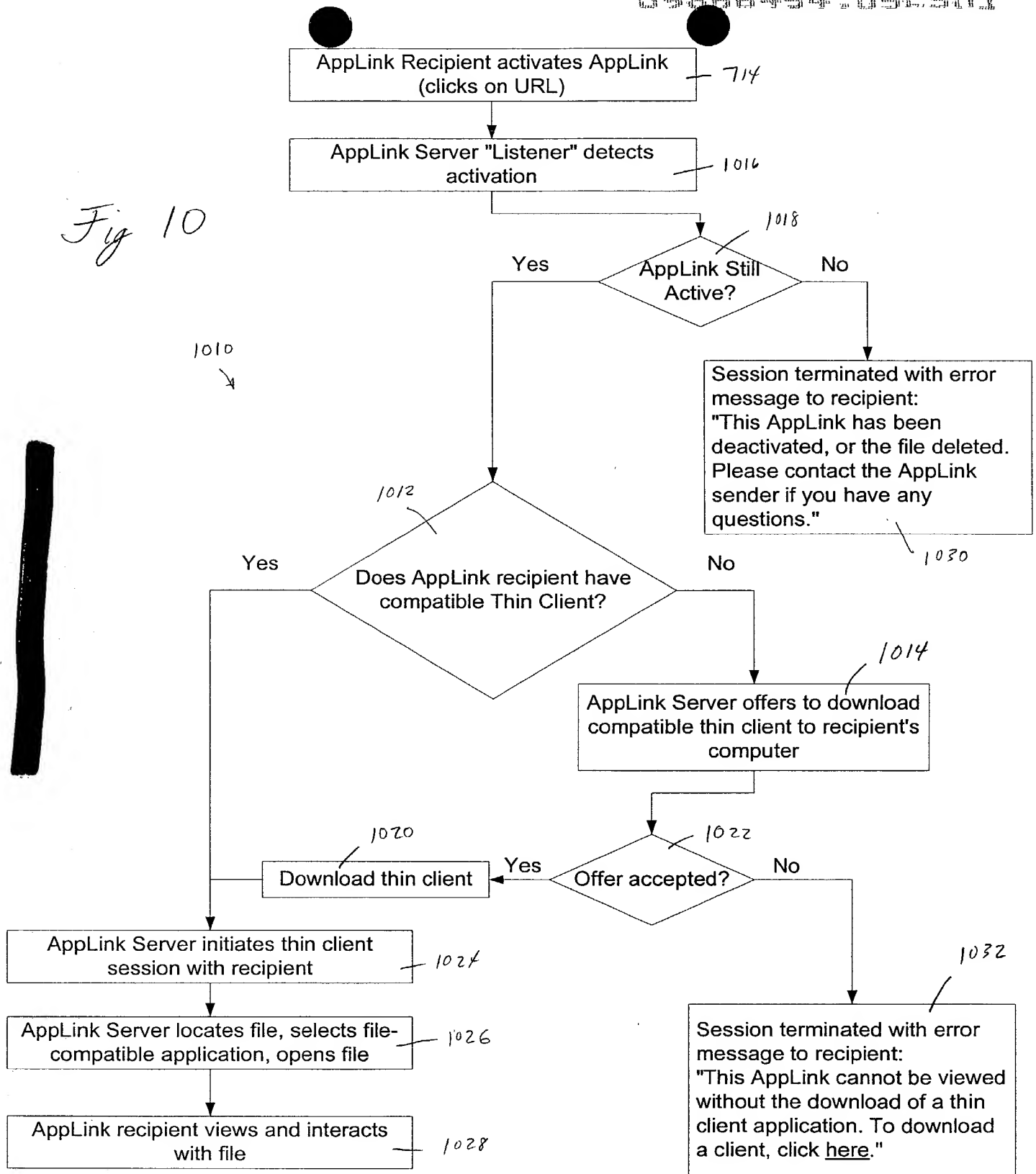


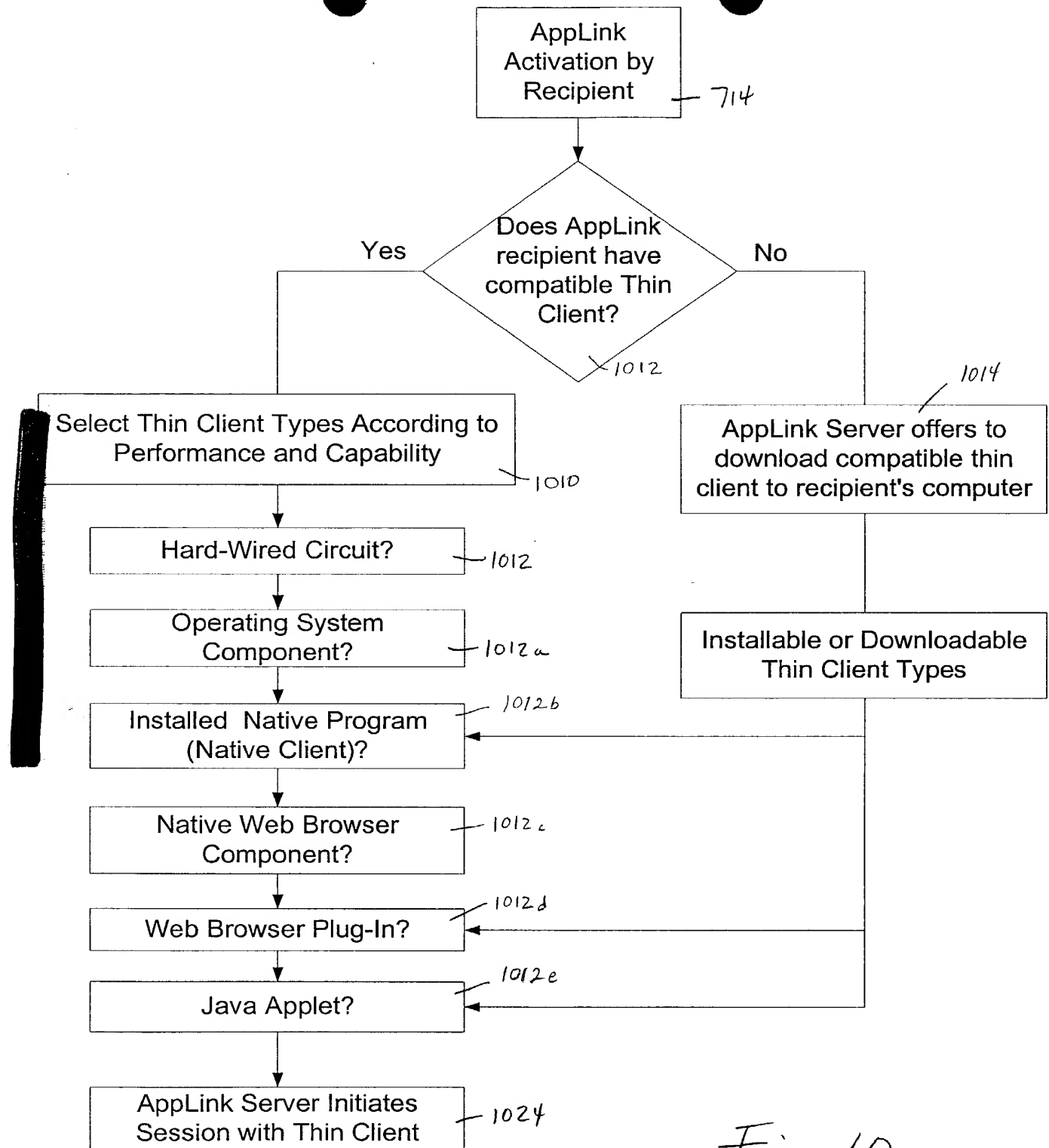
Fig 9

AppLink Transmission Methods

Fig 10



AppLink Activation by Recipient

*Fig 10 B*

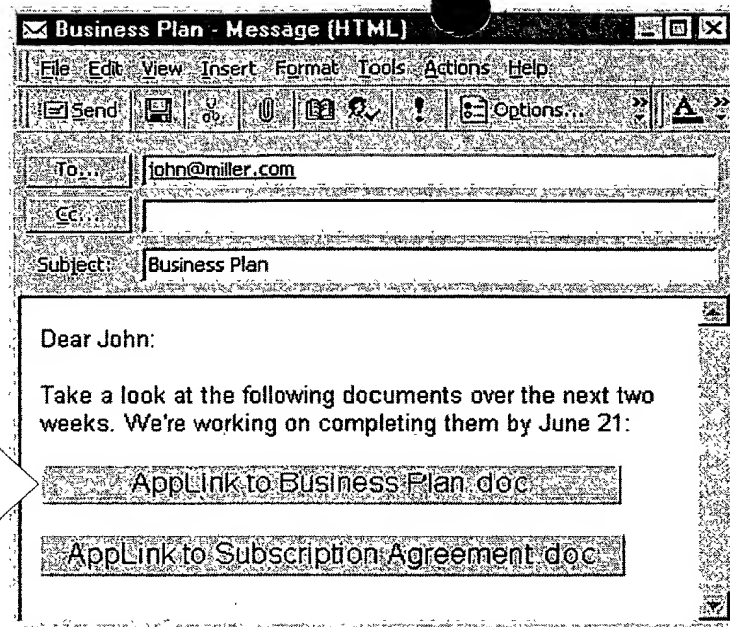
AppLink Thin Client Types, Selection



Fig 11A

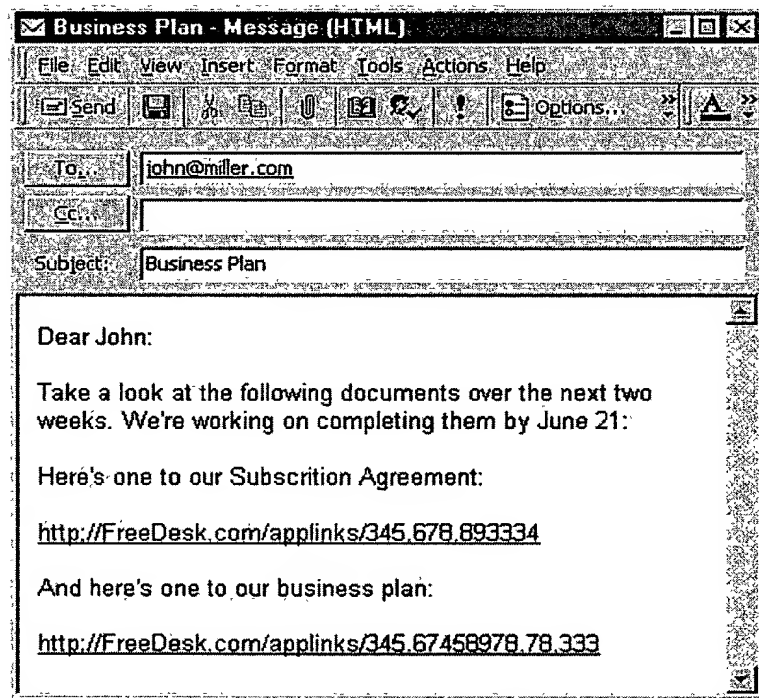
BUSINESS PLAN BUTTON HTML  
SOURCE CODE:

```
<A HREF="FREEDESK.COM/  
APPLINKS/345.678.893334"><IMG  
SRC="APPLINK BUTTON TO  
BUSINESS PLAN.JPG"></A>
```



HTML Format Email AppLink Transmission  
via Embedded Images

Fig 11B



Plain-Text Format AppLink Transmission  
via Naked Links

Email Transmission of AppLink to Recipient:  
Plain text and HTML Formats

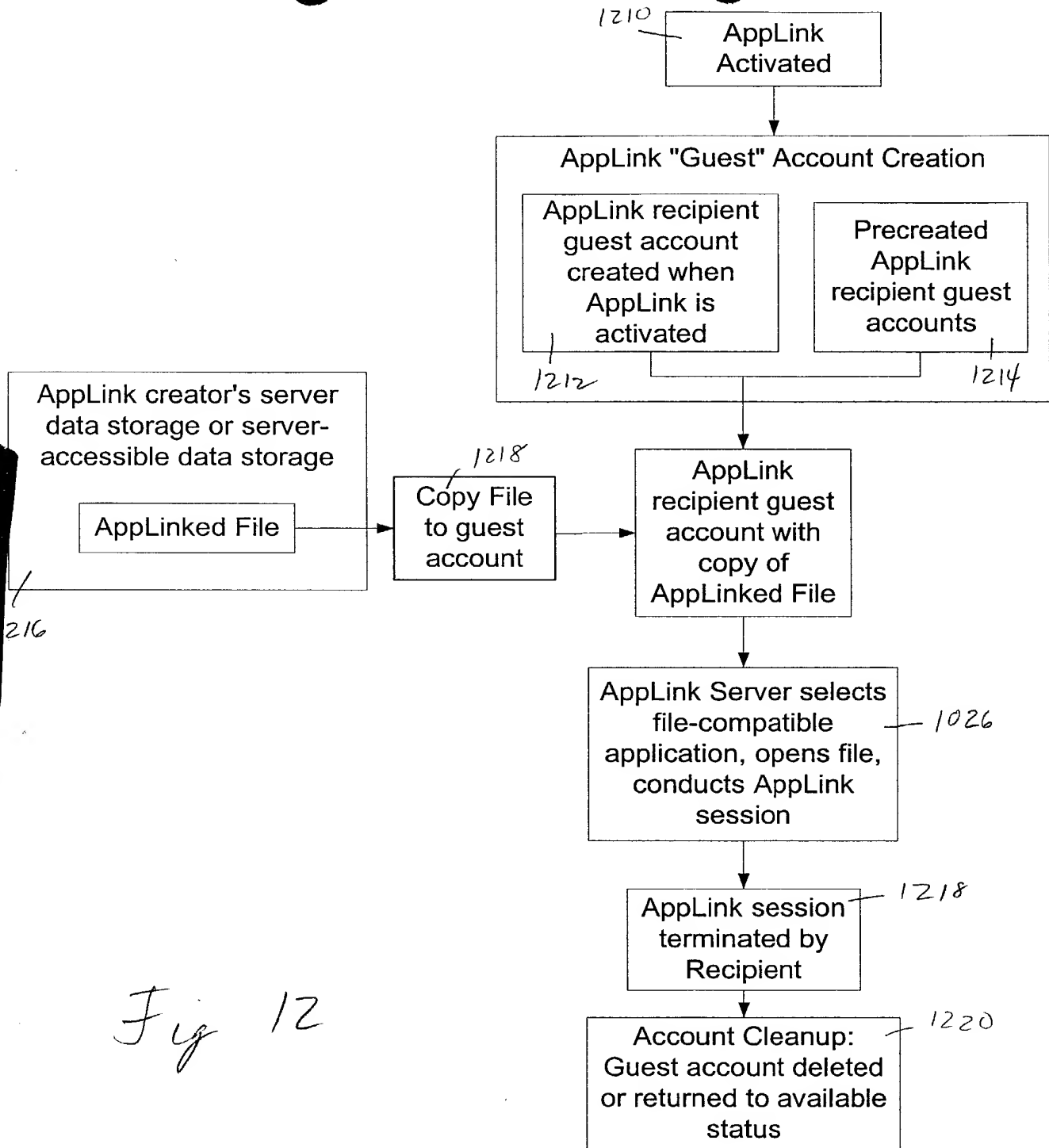
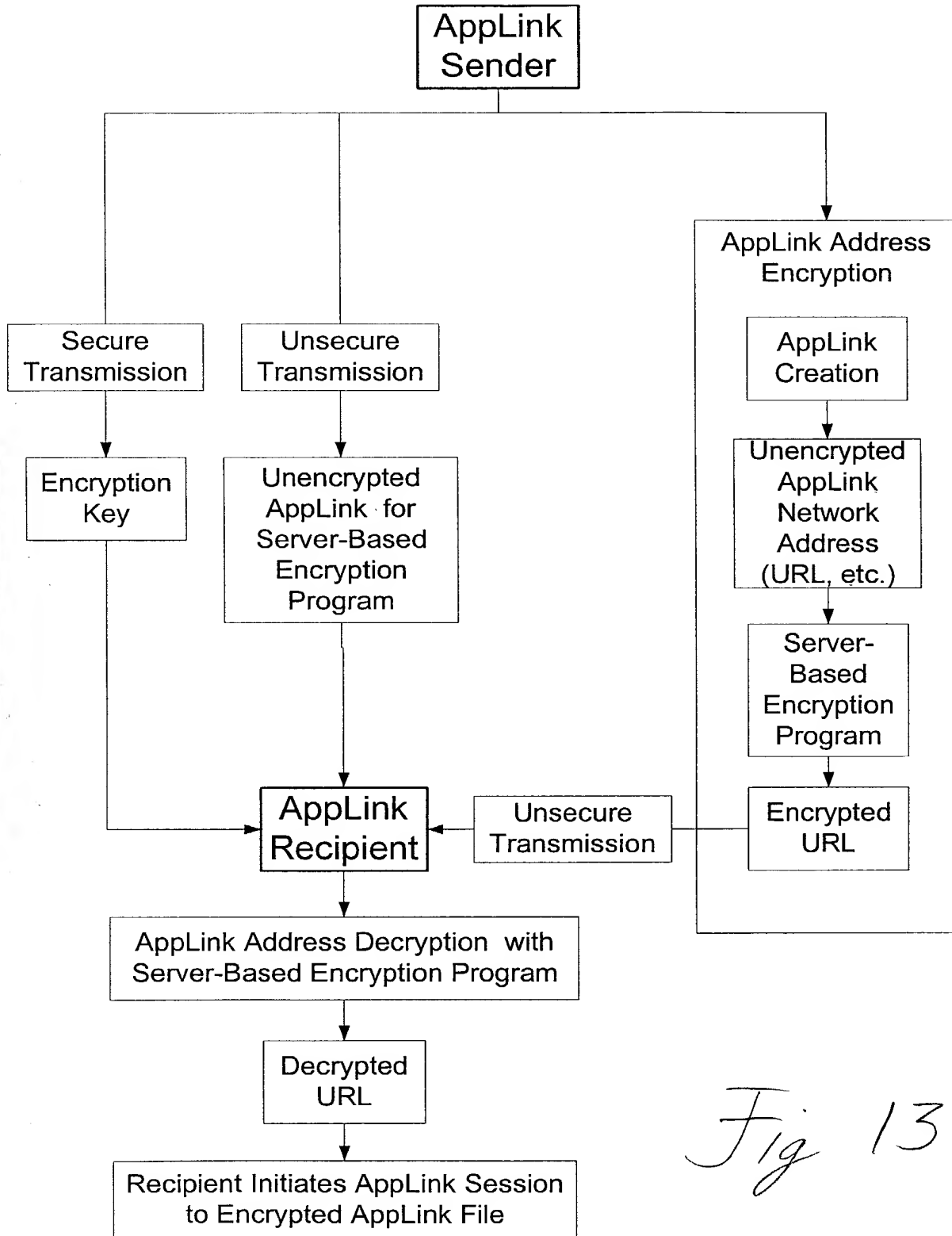


Fig 12

AppLink File Opened in Temporary Guest Account (more secure)

*Fig 13*

AppLink and Encryption:  
Encryption Program AppLink, Encrypted AppLink

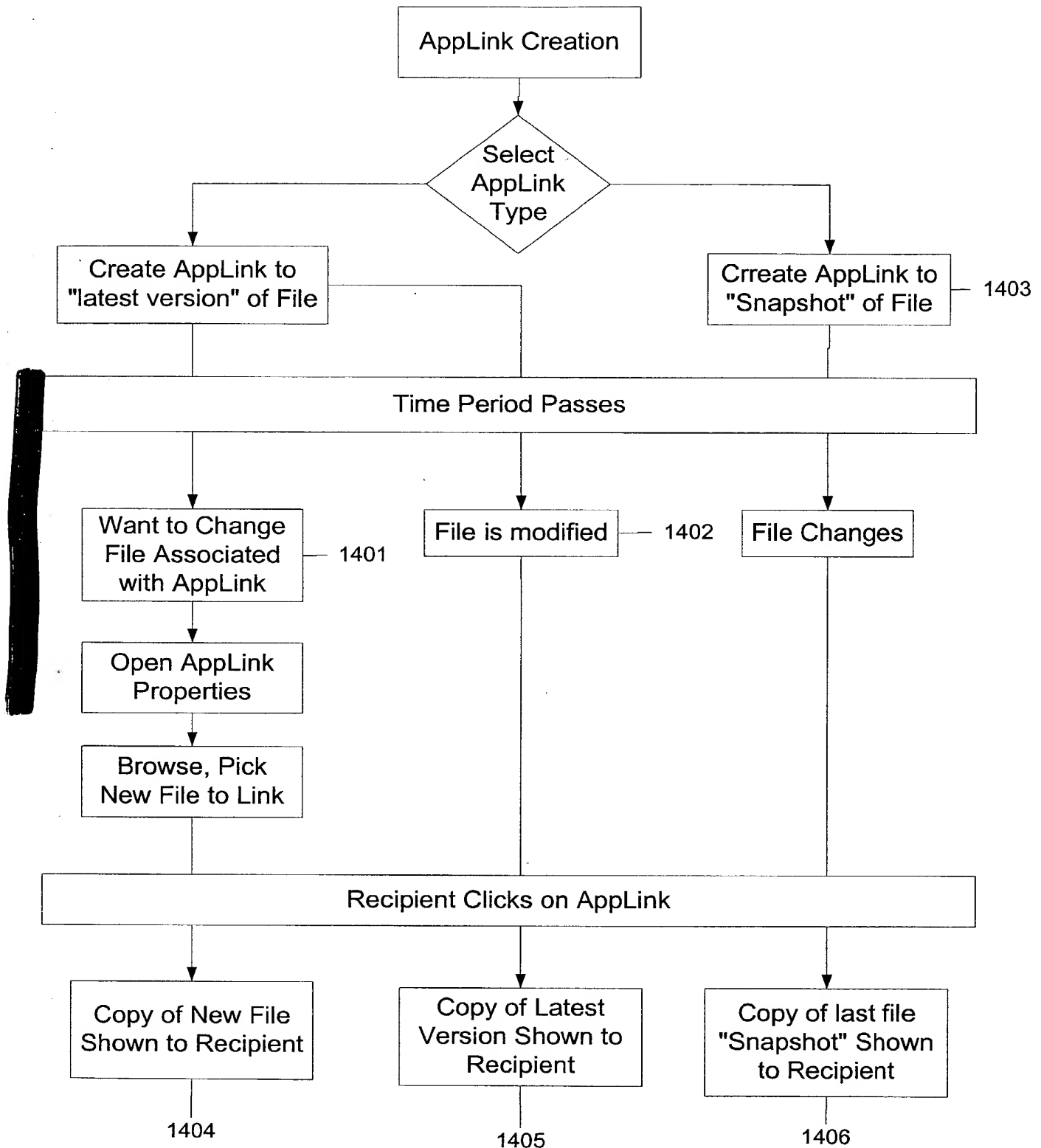
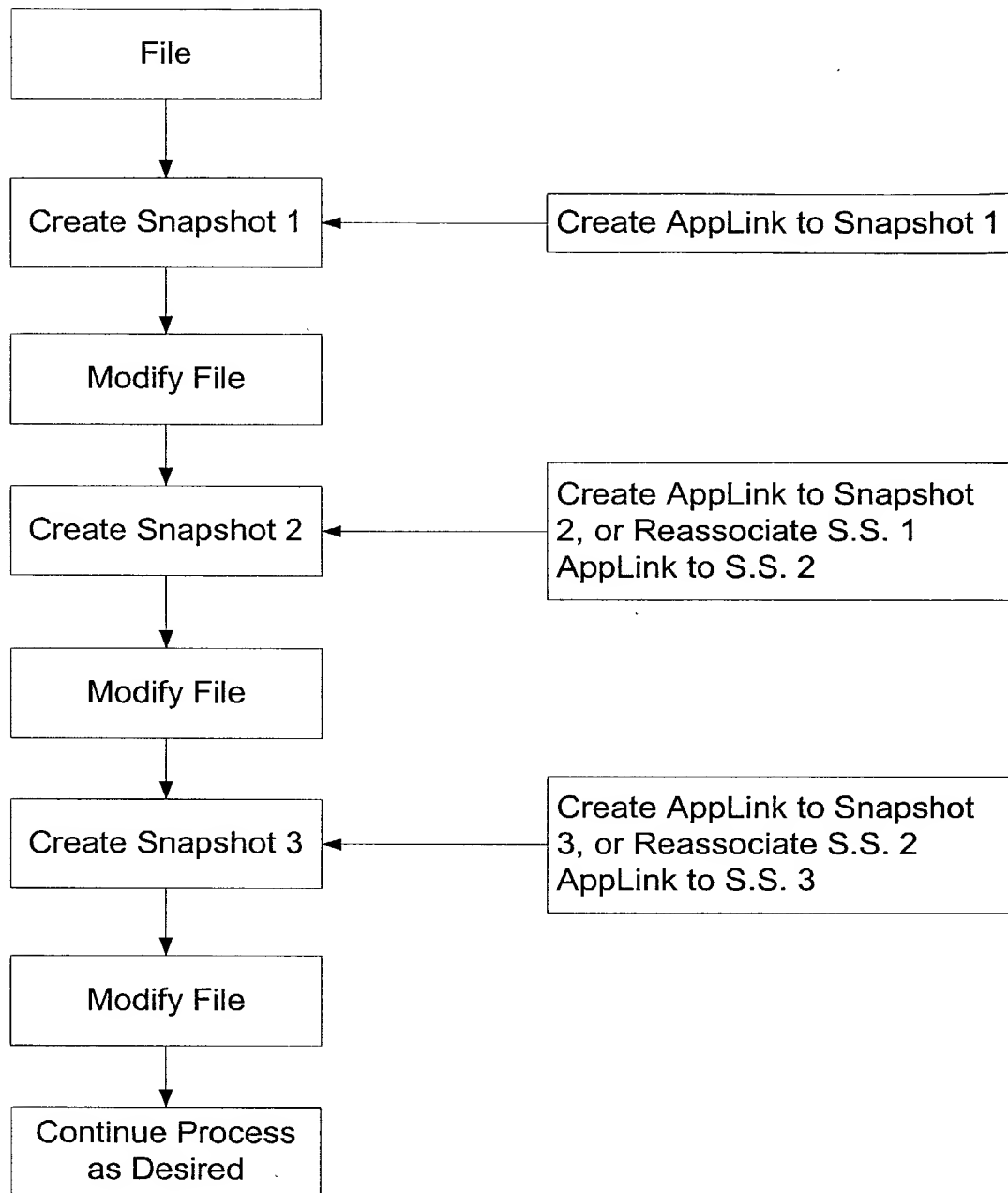
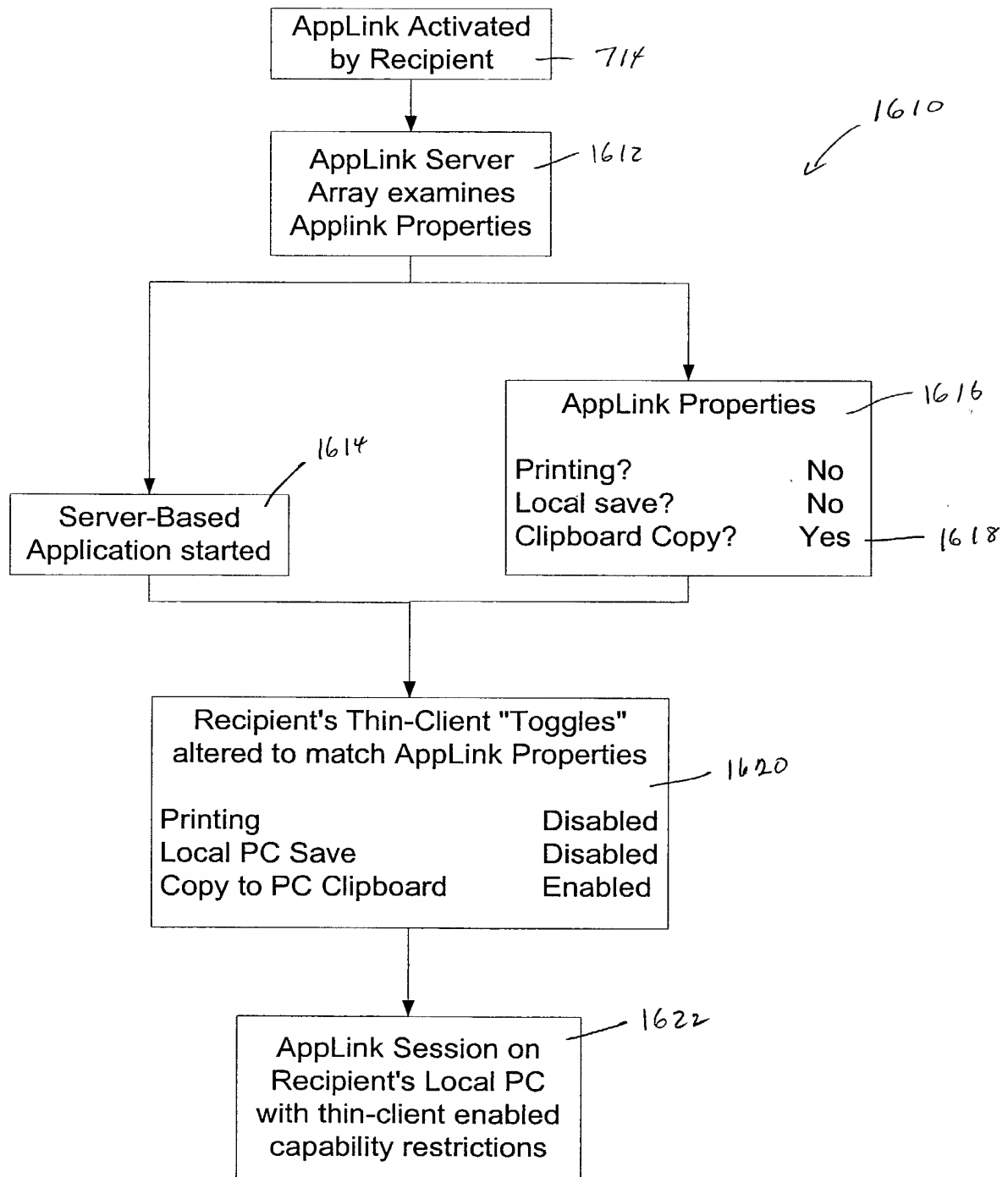


Fig. 14 Methods to Change a File After AppLink Creation



AppLinks to "Snapshots", or selected saved versions of a file, allow an AppLink creator to select which version of a file he wishes an AppLink Recipient to see.

*Fig 15*  
AppLinks and File "Snapshots"



*Fig 16*

Settable AppLink Variables through Thin-Client "Toggles"

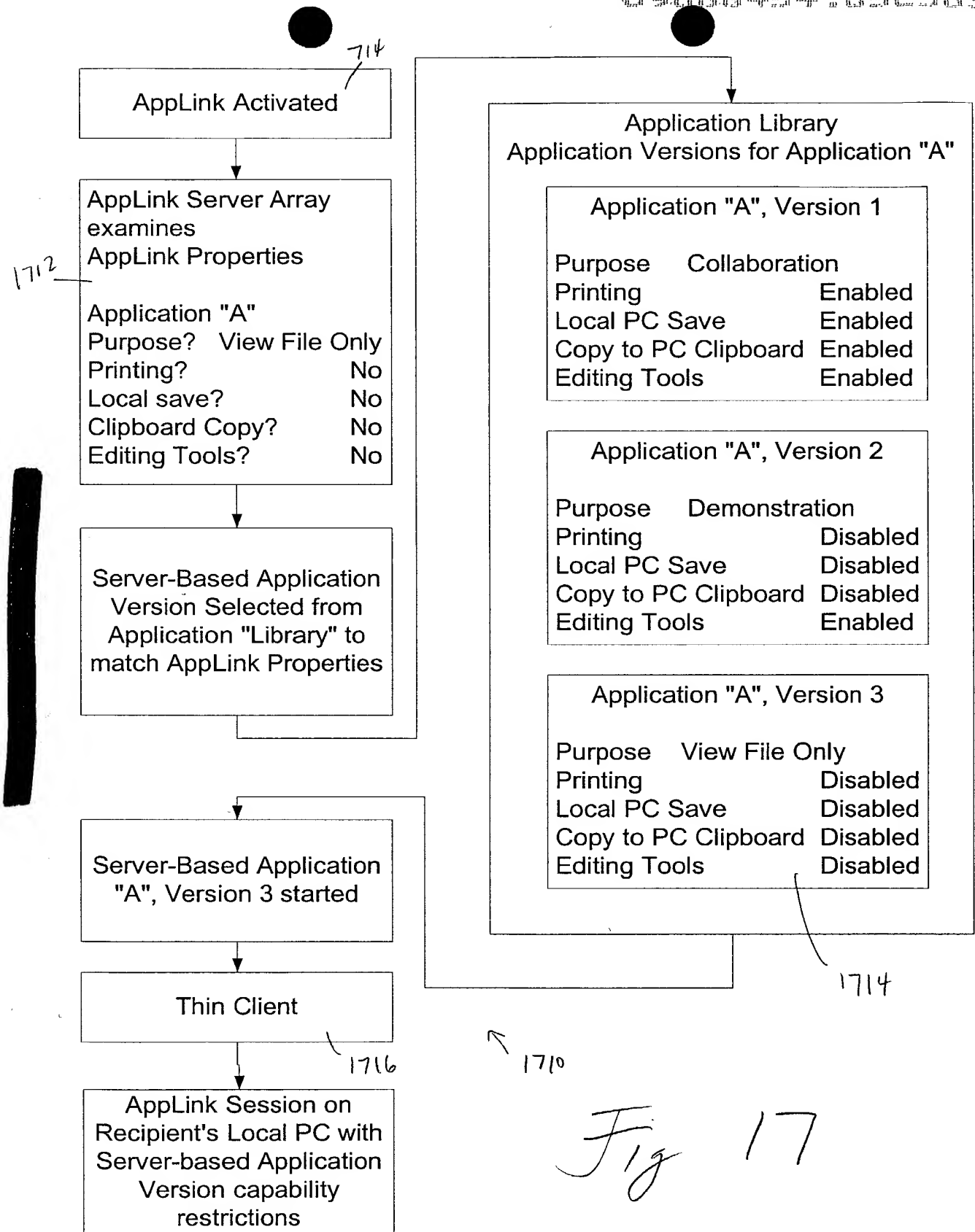
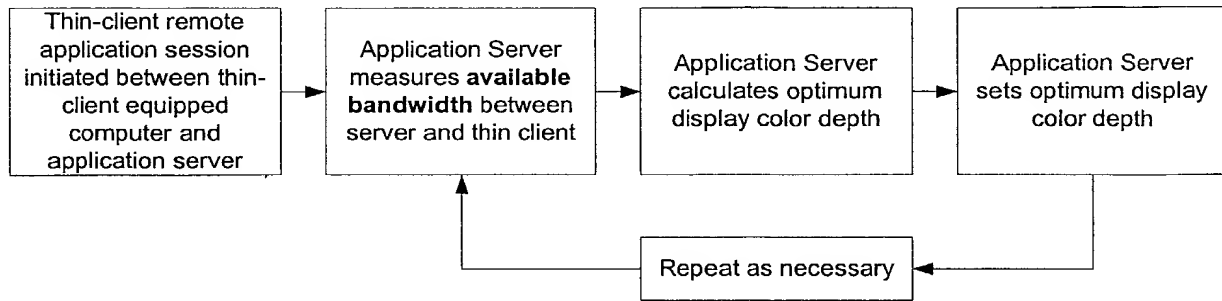


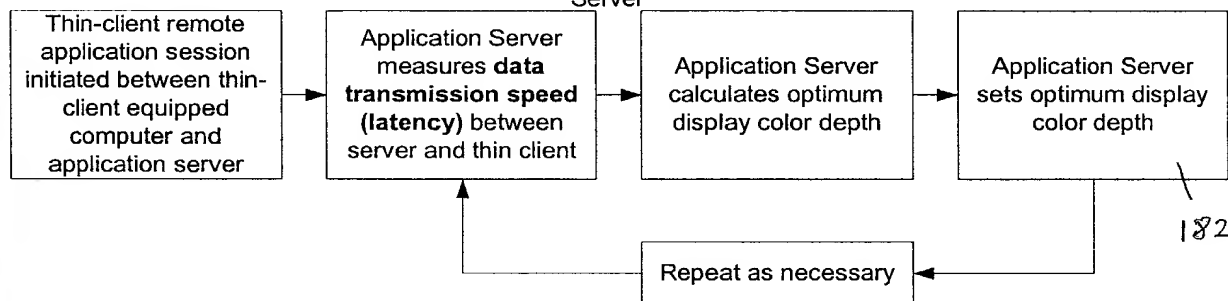
Fig 17

Settable AppLink Variables through Application Versioning

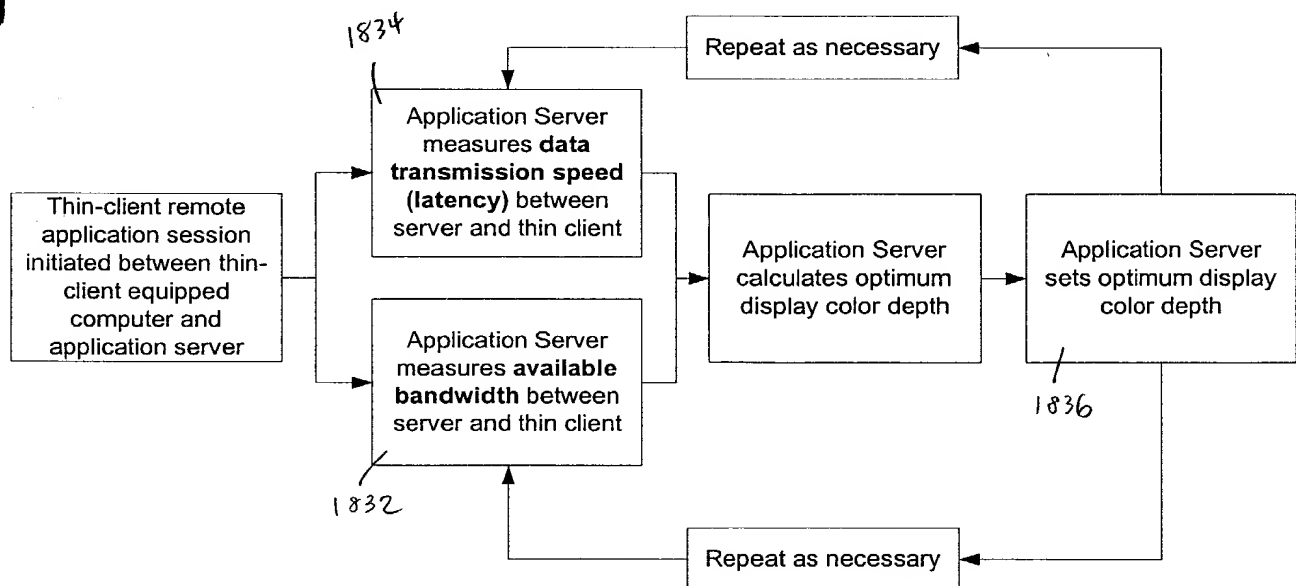
Thin-client Display ColorDepth Varied by **Bandwidth** Between Thin-client and Application Server



Thin-client Display ColorDepth Varied by **Data Transmission Speed (Latency)** Between Thin-client and Application Server



Thin-client Display ColorDepth Varied by **Bandwidth and Data Speed (Latency)** Between Thin-client and Application Server

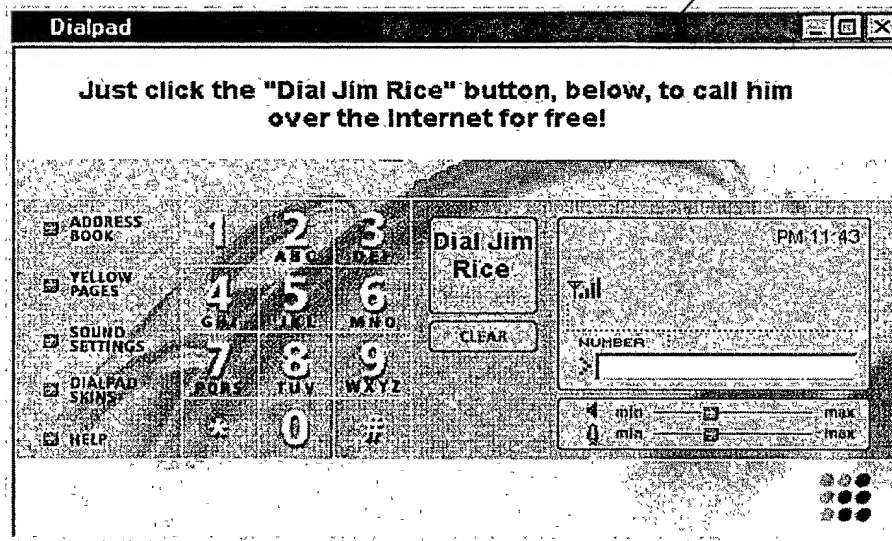


Thin-client Display ColorDepth Varied by Bandwidth and Data Speed (Latency) Between Thin-client and Application Server

Fig 18

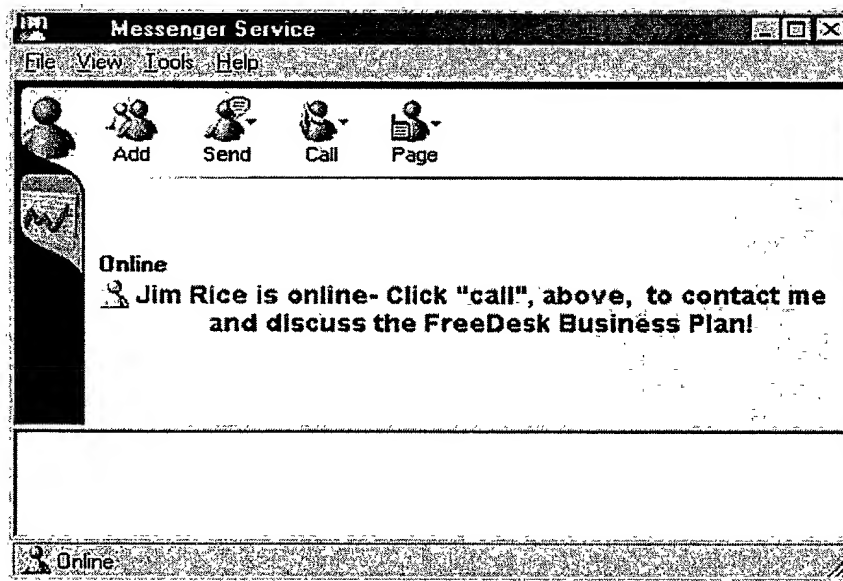


1910



Voice-Over-Internet-Protocol CommLink

Fig 19A



Instant Messenger CommLink

Fig 19B

Single-Application CommLinks in Thin Client Windows

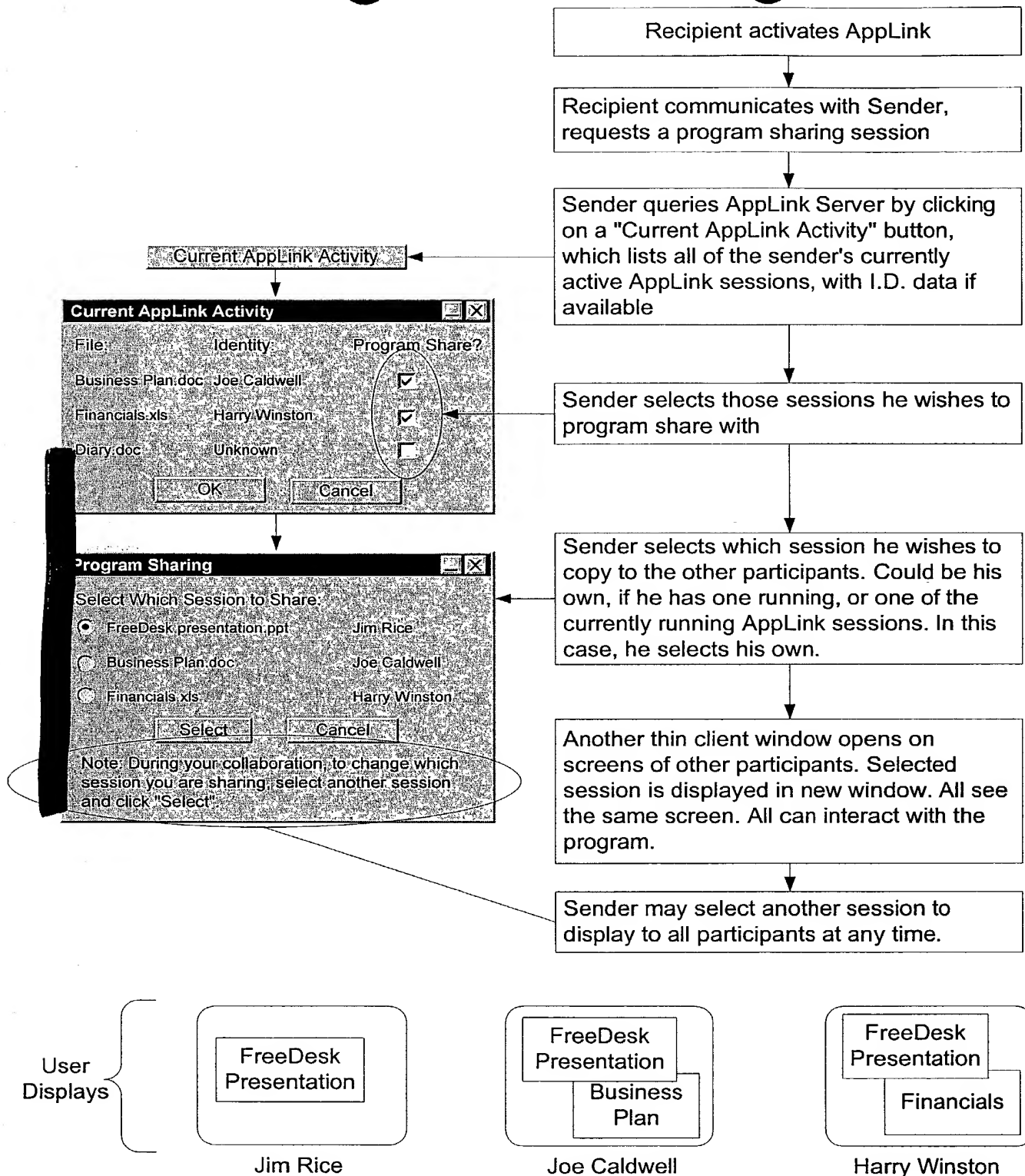


Fig 20

AppLink with Program Sharing: Additional Session Mode

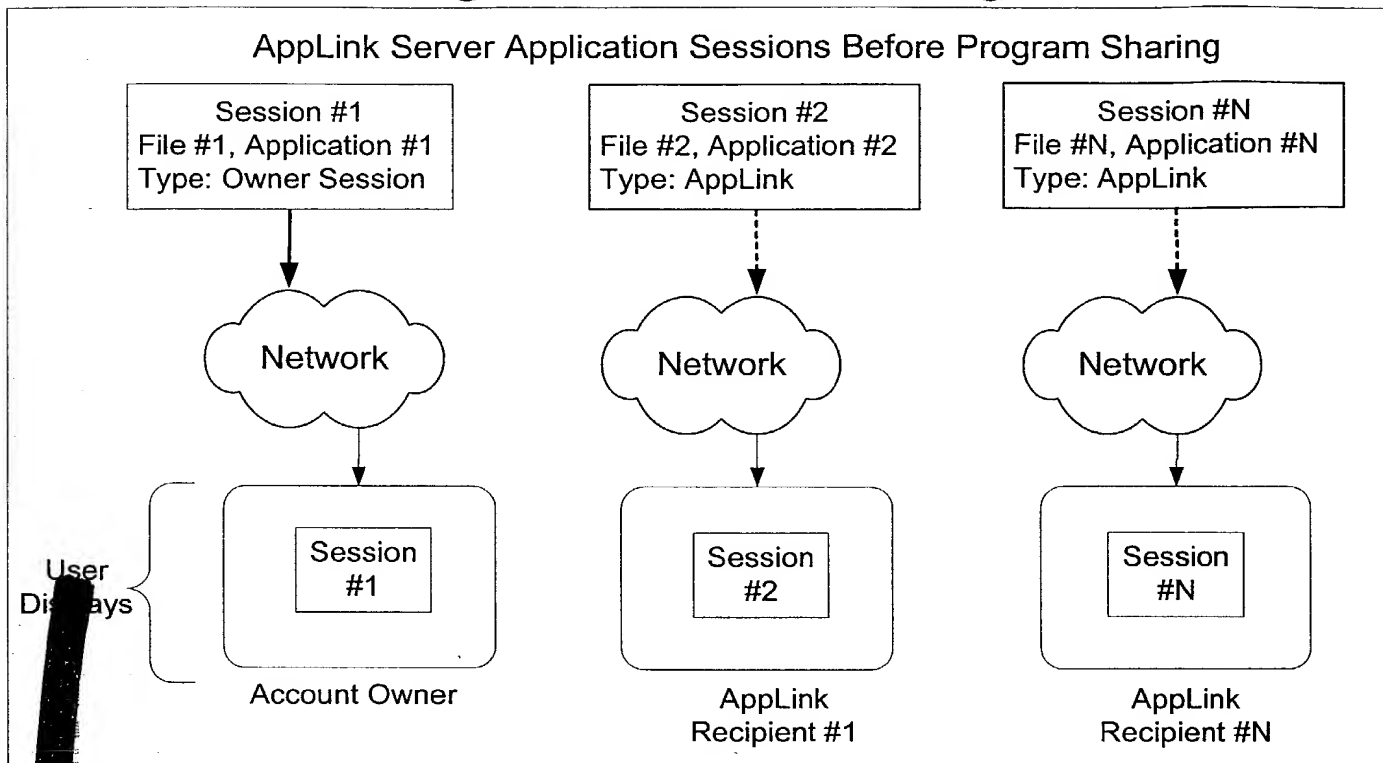


Fig 21

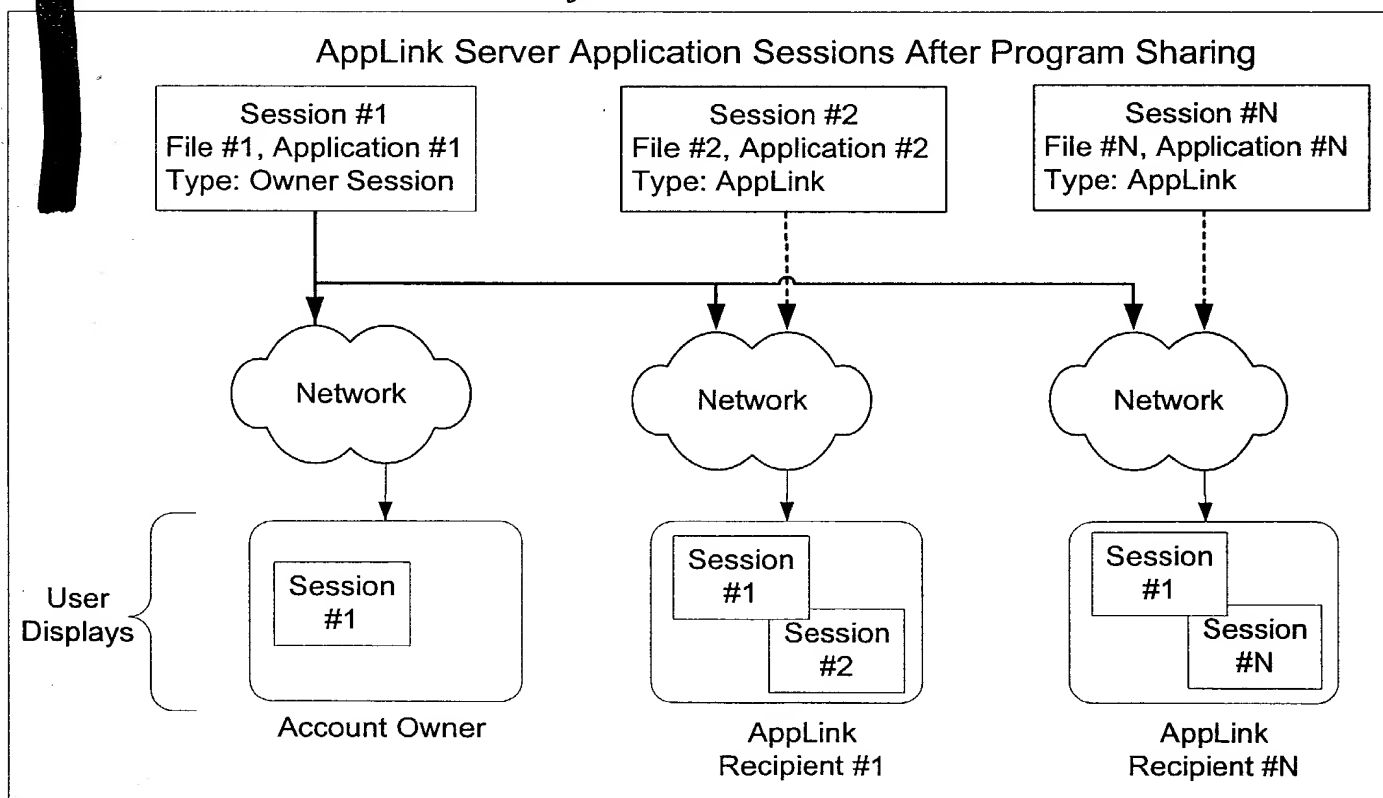


Fig 22

AppLink Program Sharing Schematic: "Additional Session" Mode

18. *Phragmites australis* (Cav.) Trin. ex Steud.

Fig 23

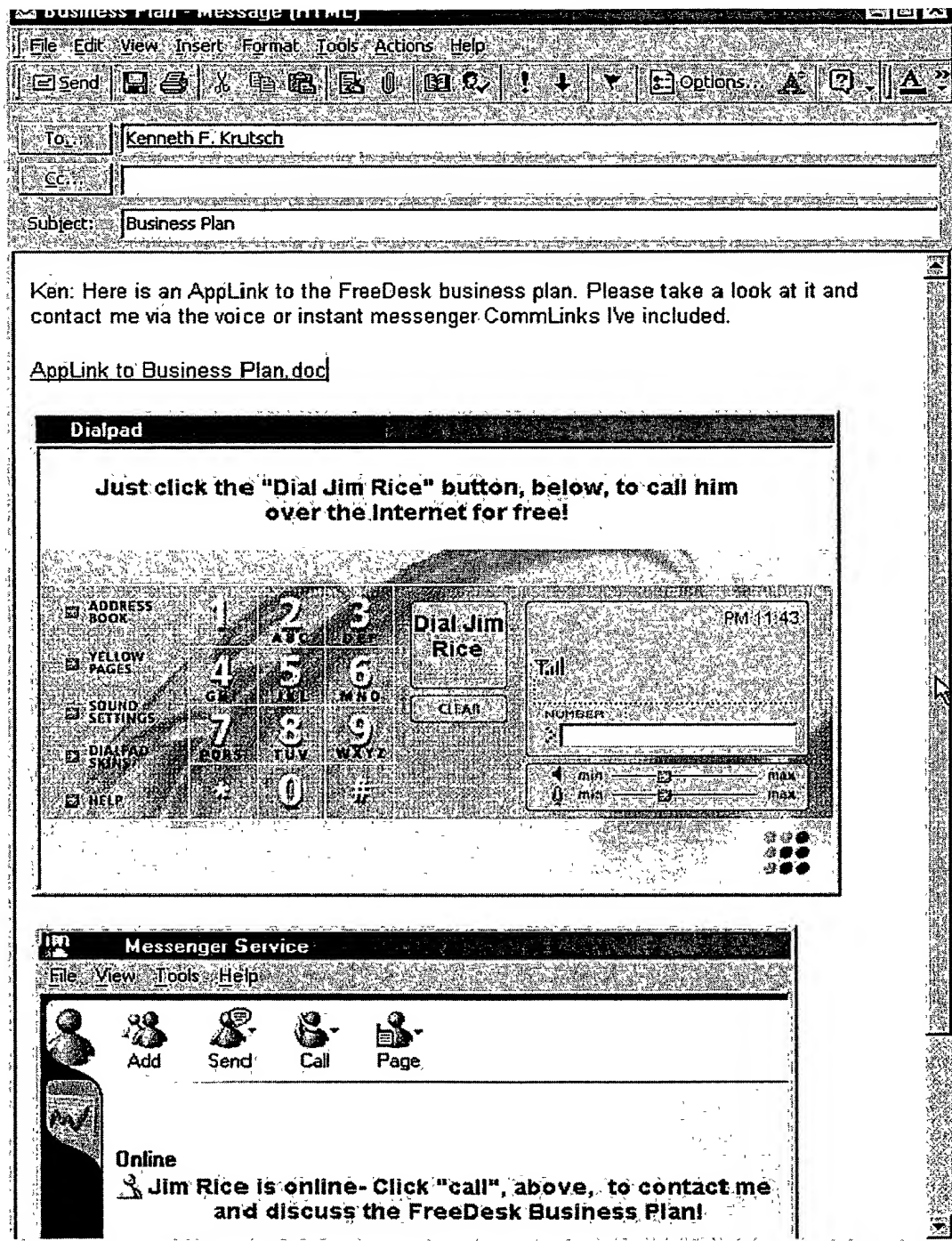


Fig 24A

**Multiple CommLinks in an Email HTML (Rich Text)  
Page (Embed-an-App)**

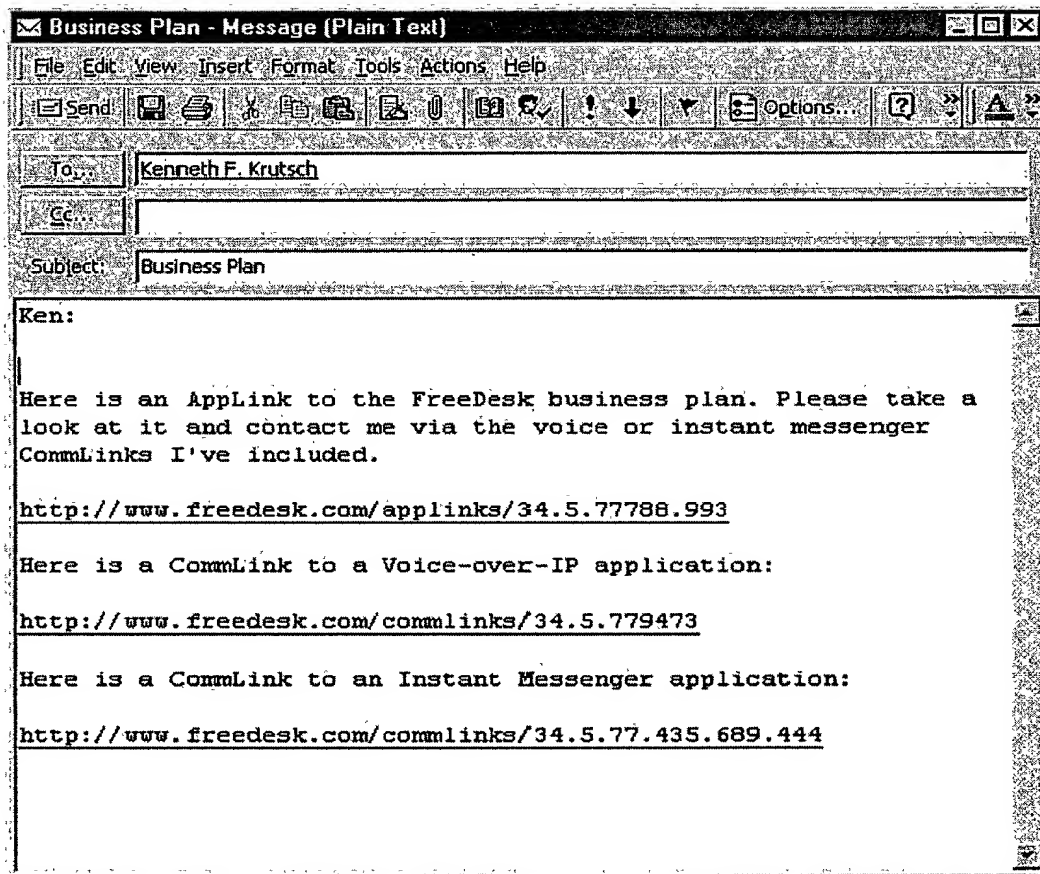


Fig 24B

Multiple CommLinks in a Plain-Text Email

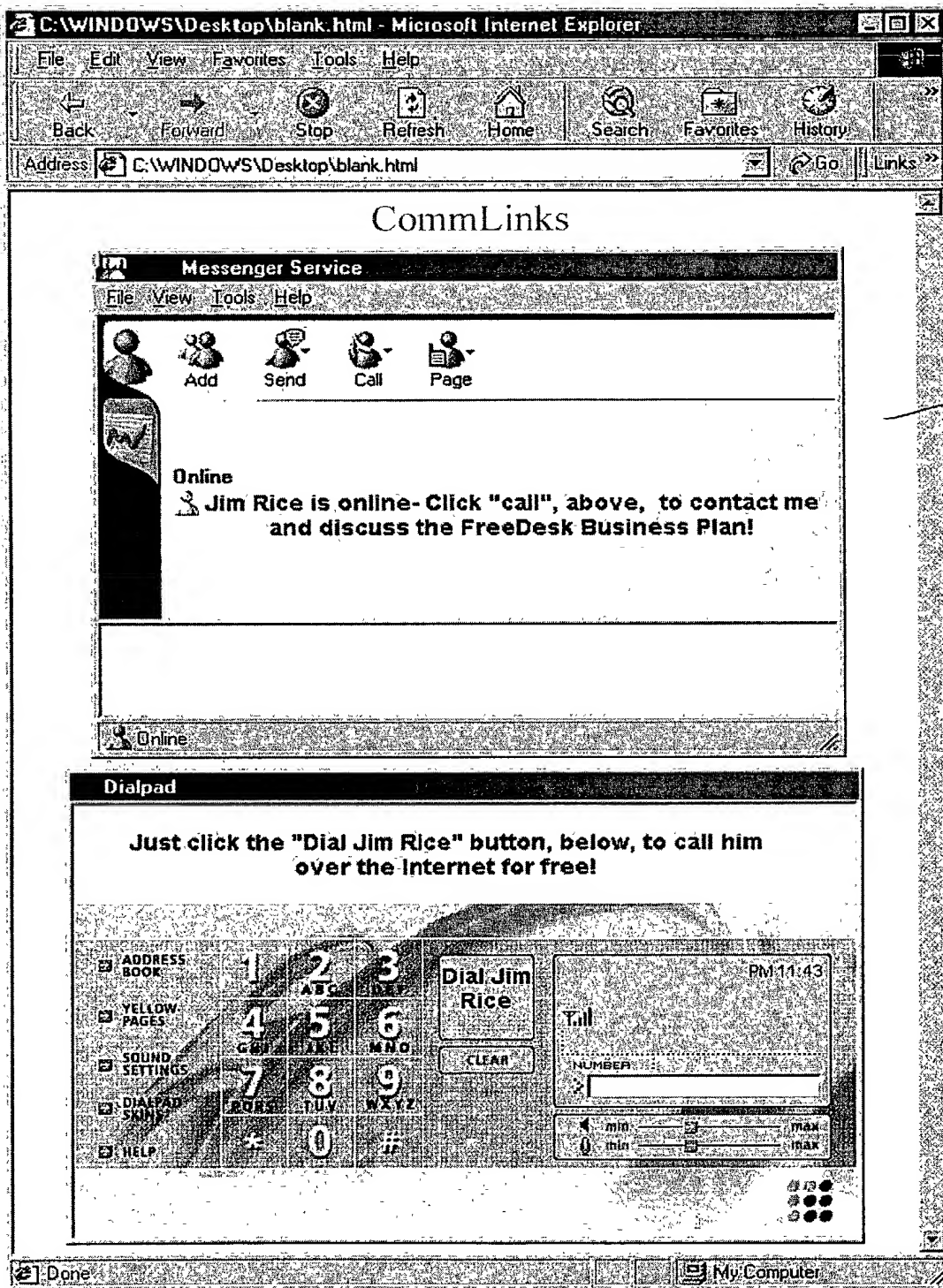
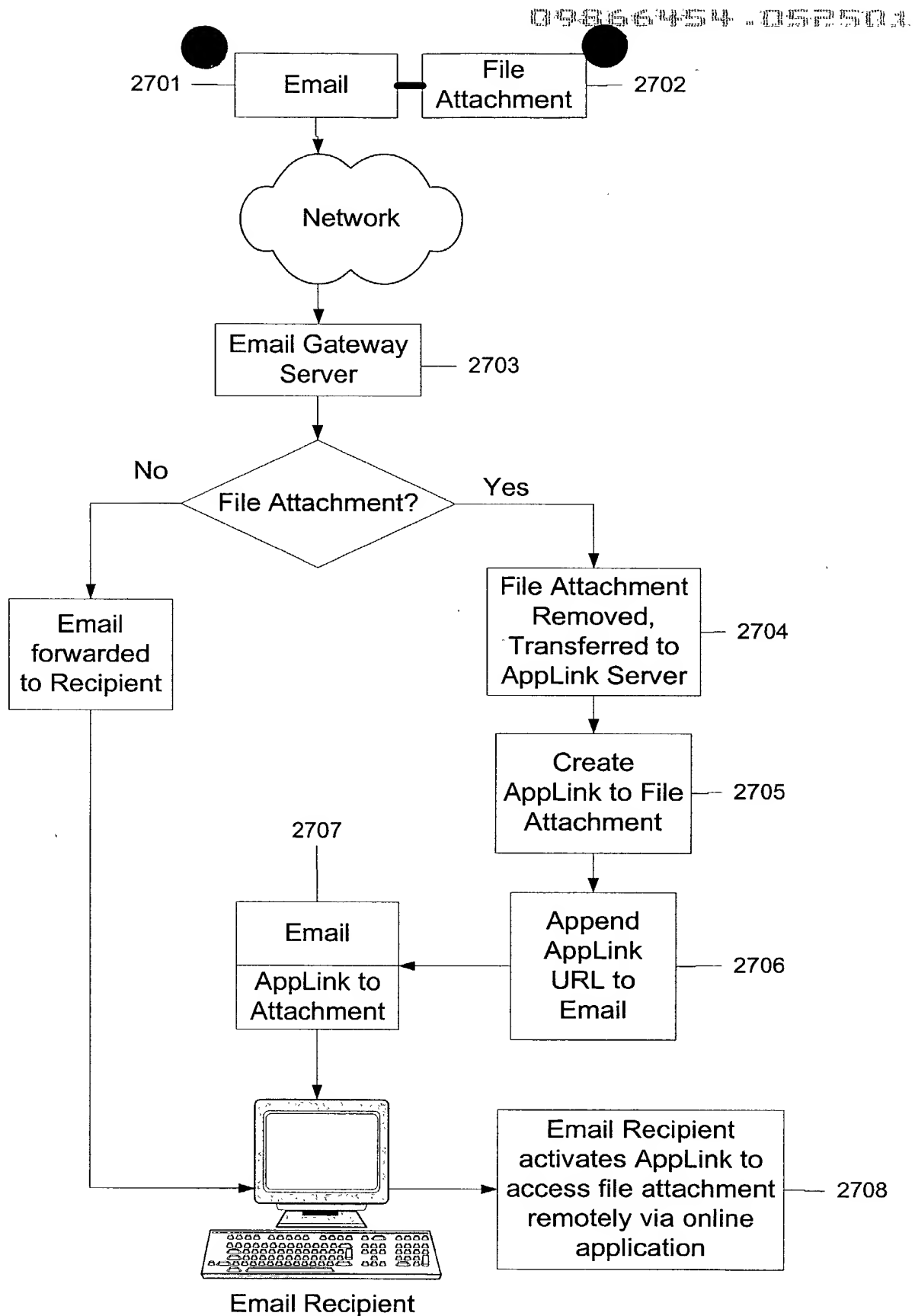


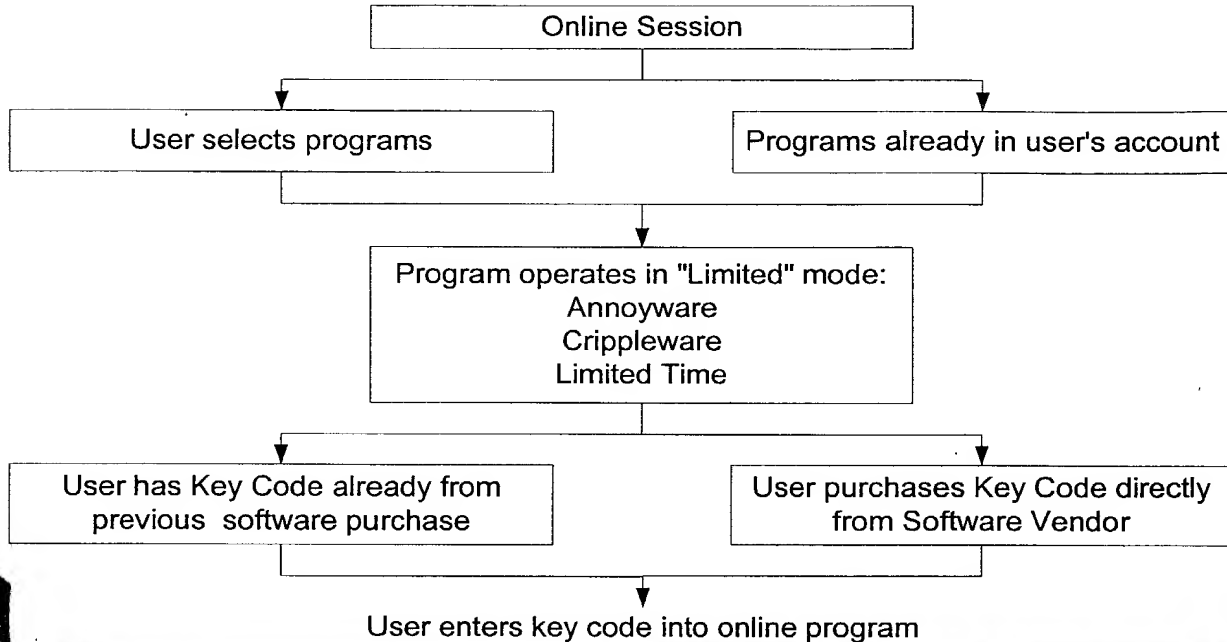
Fig 25

Multiple CommLinks in a Web Page (Embed-an-App)



**Fig. 27 AppLink Email Gateway Schematic: Incoming Email**





**Enter Passwords**

This screen is used to activate CompuPic using the registration information provided to you by Photodex. If you have not registered CompuPic, click here for information on registering.

**Password Information**

Name:

Phone Number:

Password:

Note: Your name, phone number and password should appear exactly as filed with Photodex. If you have trouble, confirm the spelling of each field, and try your name with and without your middle initial. For further help, please see our registration help and troubleshooting.

Enter your password information and click the 'Activate Password' button. If you received multiple passwords, repeat this process for each password.

**Activate Password**

**Exit**

**Enter Passwords**

Program operates in "Unlimited" mode

### Advantages

- ❖ Application Service Provider not involved with program activation
- ❖ Application Service Provider charges program hosting fee
- ❖ Program purchase revenue goes directly to software vendor
- ❖ Uses existing program limitation mechanisms in new way
- ❖ Allows programs with Key Code entry limitations to be put online by without license agreements with Software Vendors, since their rights are protected by the limitation mechanism
- ❖ Users can take advantage of programs (and key codes) already owned

Online Application Purchase Model with User-Entered Key Codes

*Fig 28*

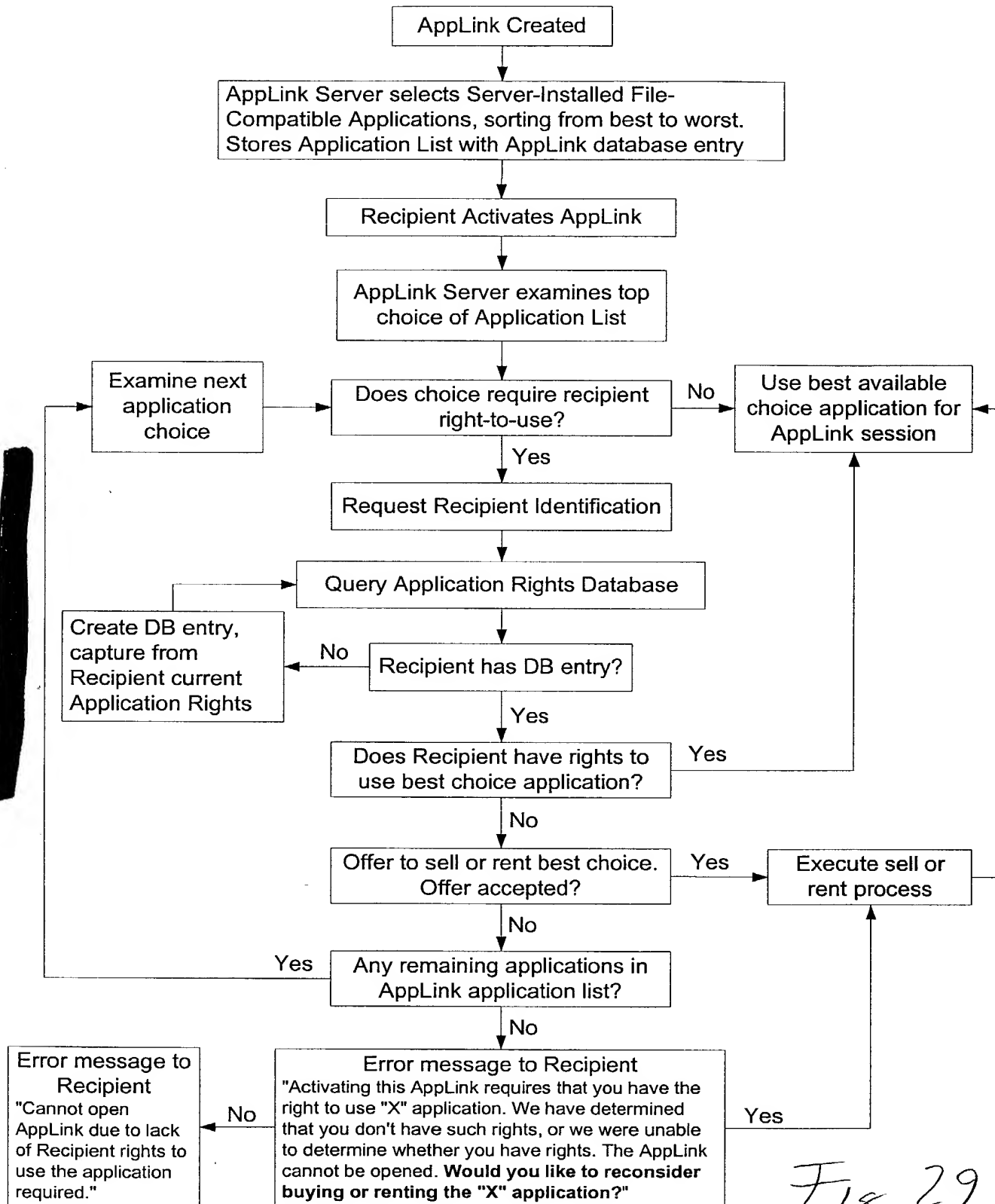


Fig 29

Example "AppLink Recipient Application Rights" Database  
Interaction With Recipient

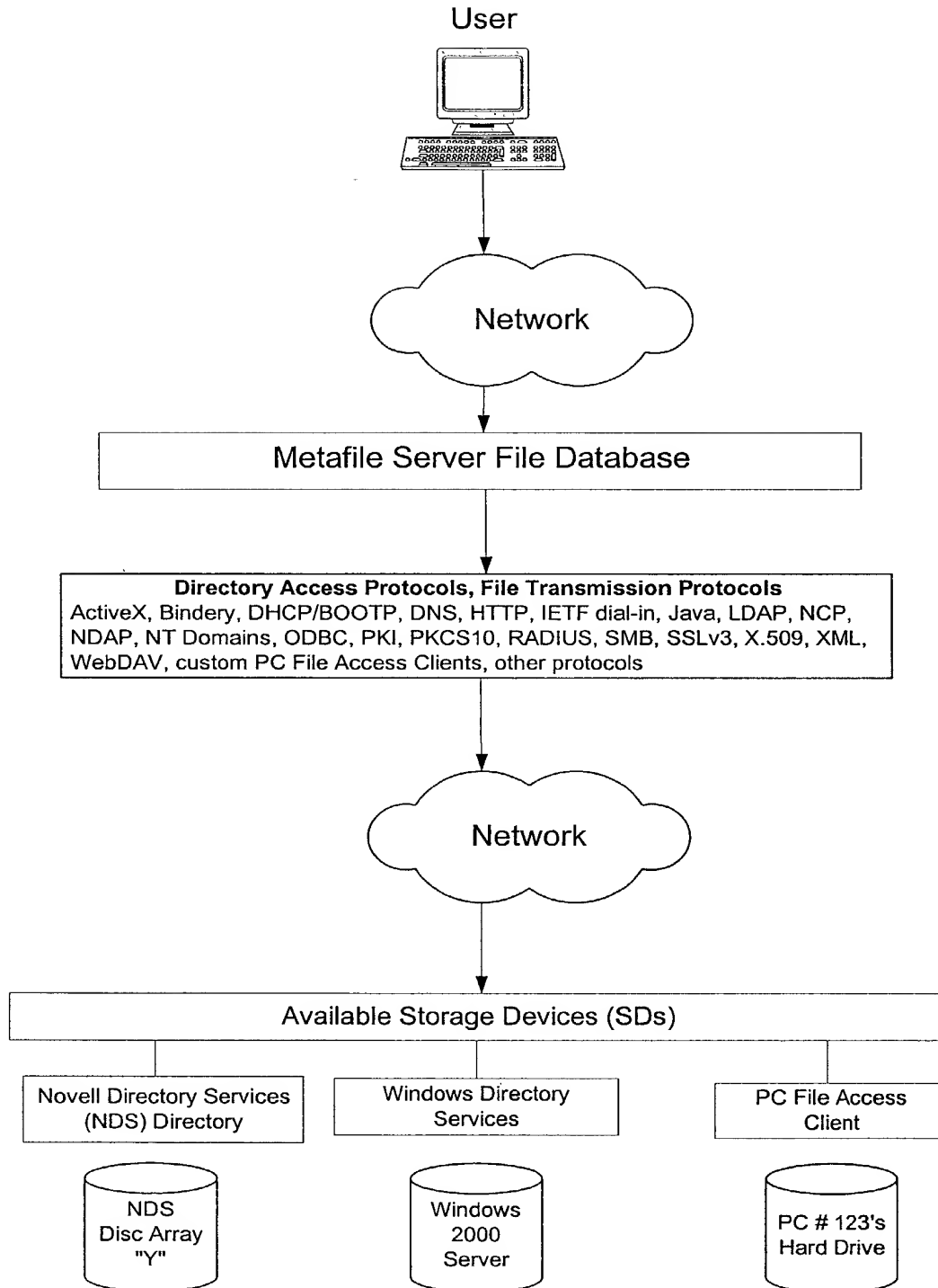
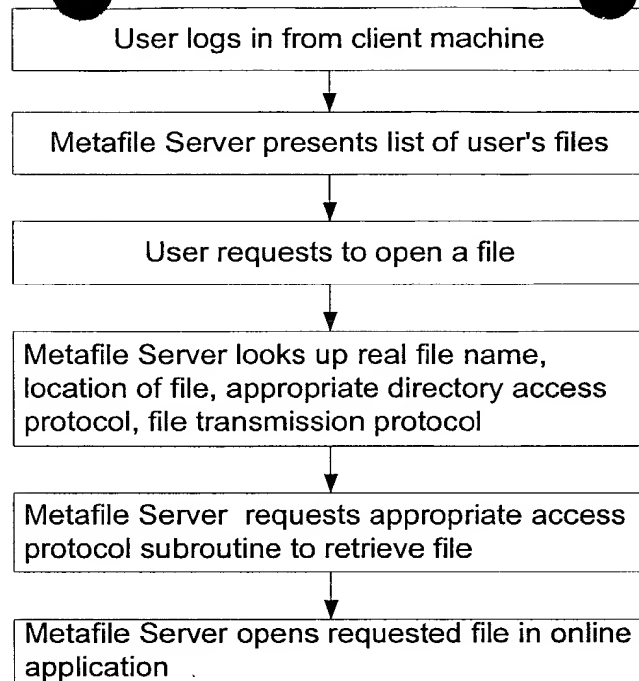
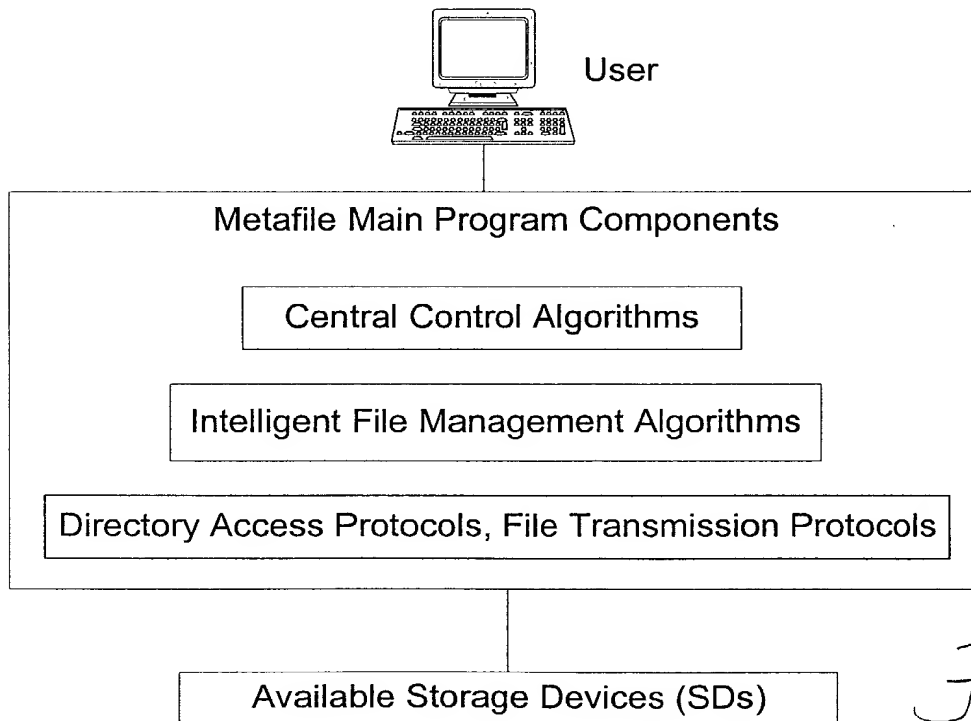


Fig 30

**Metaverse System Schematic**



Metafile User File Request Schematic

*Fig 31a**Fig 31b*

Metafile Server Main Program Components Schematic

User John Smith's File List, File #1

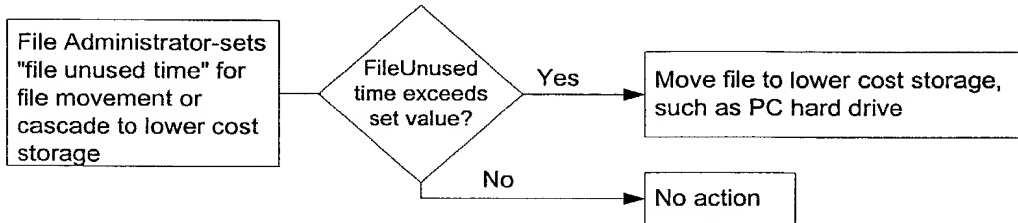
User's File Name	Business Plan
Actual File Name	Y56cSk89
Location	NDS Disc Array "Y", subdirectory 345
File Directory System	NDS
File Transmission	Ethernet
Other Metadata:	
Author	John Smith
Last Modified	01/23/01
Groups	Senior Executives
AppLinks	http://344.5.456.72/ajkke
	http://378.6.72/a5ku

User John Smith's File List, File #2

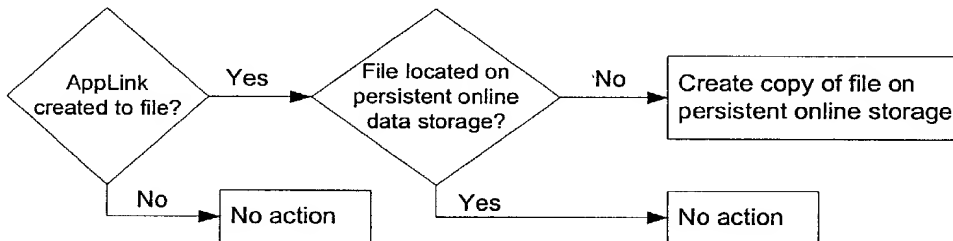
User's File Name	Financials, 1999
Actual File Name	ki56mDFRT
Location	PC #123, disc "C", "My Documents"
File Directory System	custom PC File Access Client
File Transmission	FTP
Other Metadata:	
Author	Ashley J
Last Modified	01/01/01
Groups	Senior Executives, Financial Analysts

Fig 32

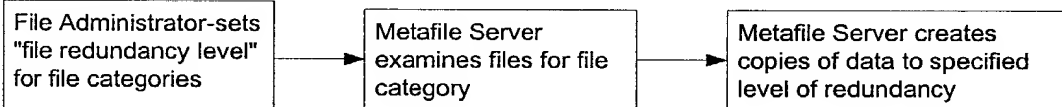
**Individualized File Location Management According to Frequency of Use:** Files which have not been used for a specified time period are moved automatically off of high-cost, always-network-available storage such as a dedicated datacenter's disc array and onto lower-cost data storage, such as a network-connected PC's hard drive.



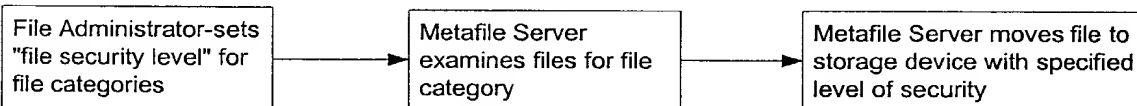
**AppLink File Management:** When a user creates an AppLink to a file on his laptop, a copy of that file must be located on always-online storage, because if the laptop is removed from the network and a recipient clicks on the AppLink, the file will not be available.



**Individualized File Redundancy According to Importance:** Files can have centrally set variable redundancy based on individual file characteristics. A particularly important file, such as a customer database, could have a redundancy level of 5, that is, 5 complete copies of the database are kept in different locations.



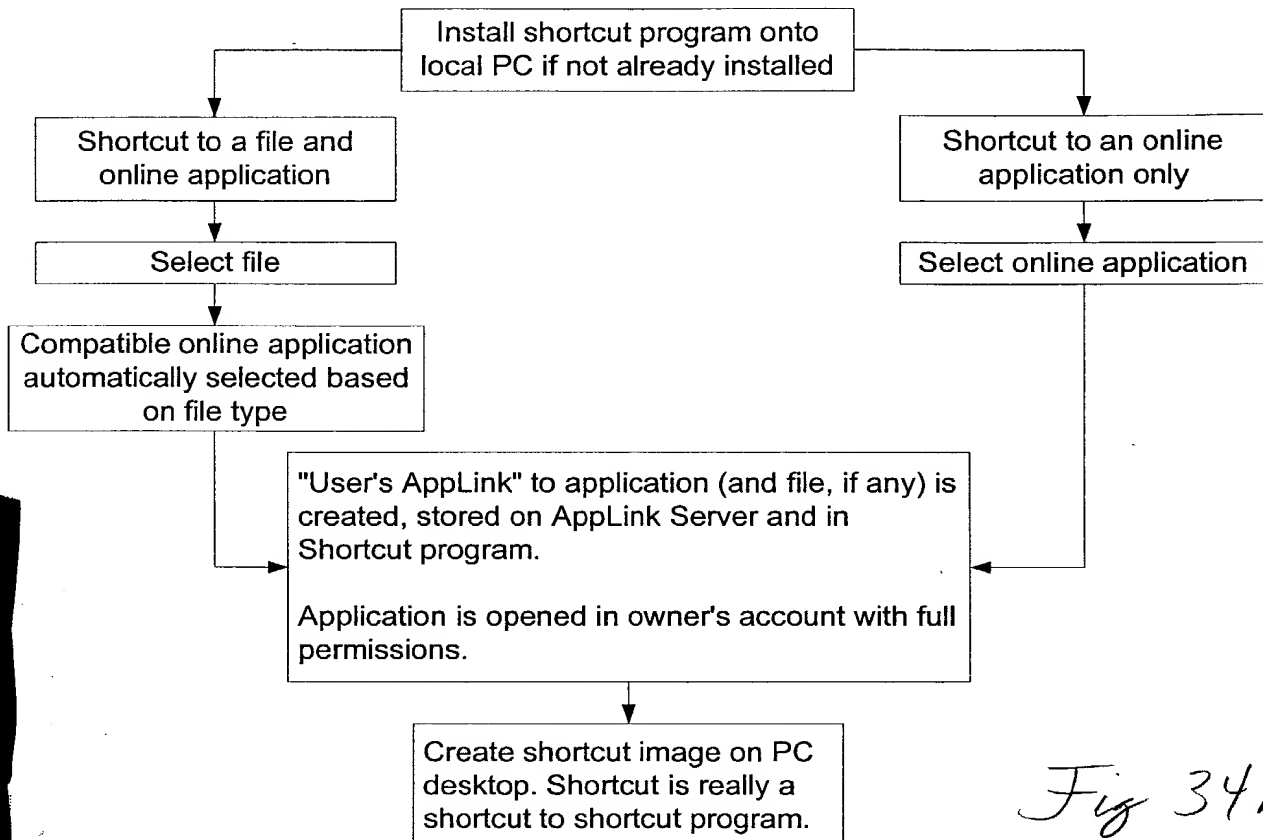
**Individualized File Security According to Need:** Files that need to be kept secure would be kept on secure storage, such as a disc array at a secure facility, regardless of frequency of use.



*Fig 33*

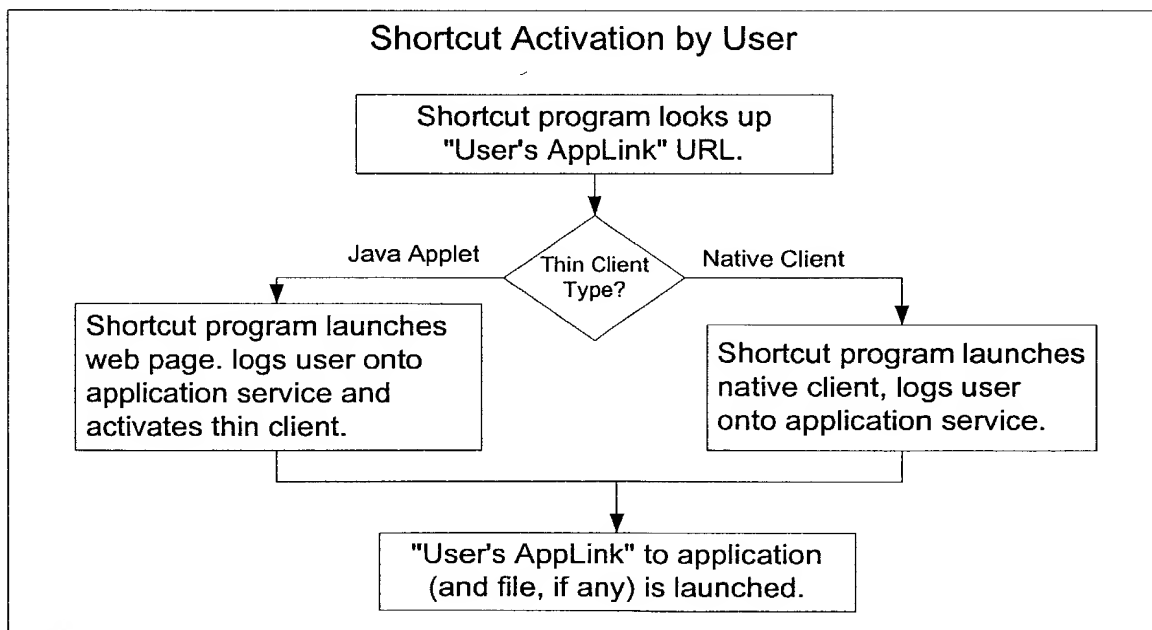
## Metafile Intelligent File Management Algorithms

### Shortcut Creation by User



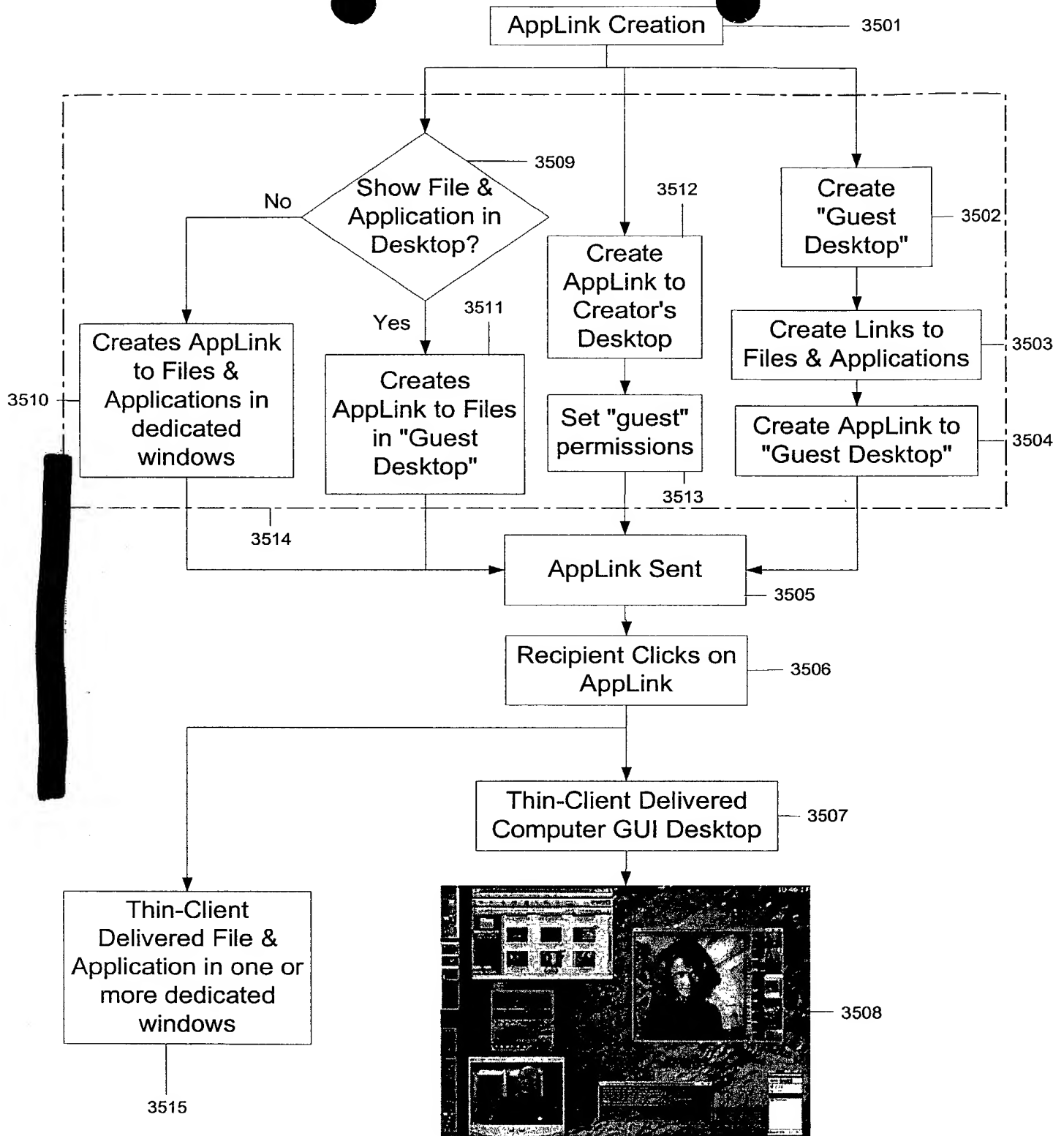
*Fig 34A*

### Shortcut Activation by User



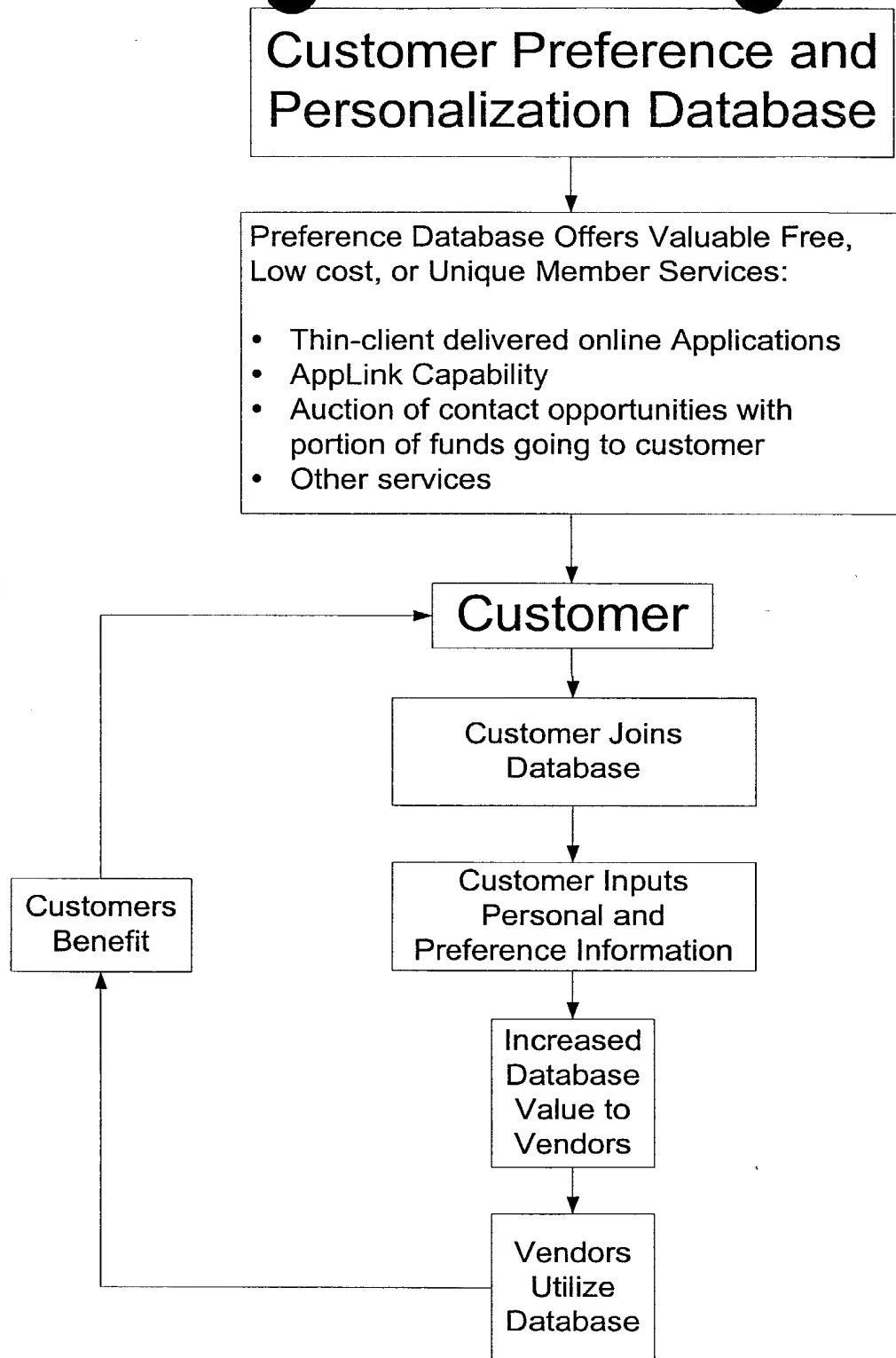
AppLink "Shortcut" for User's local PC GUI "Desktop"

*Fig 34B*



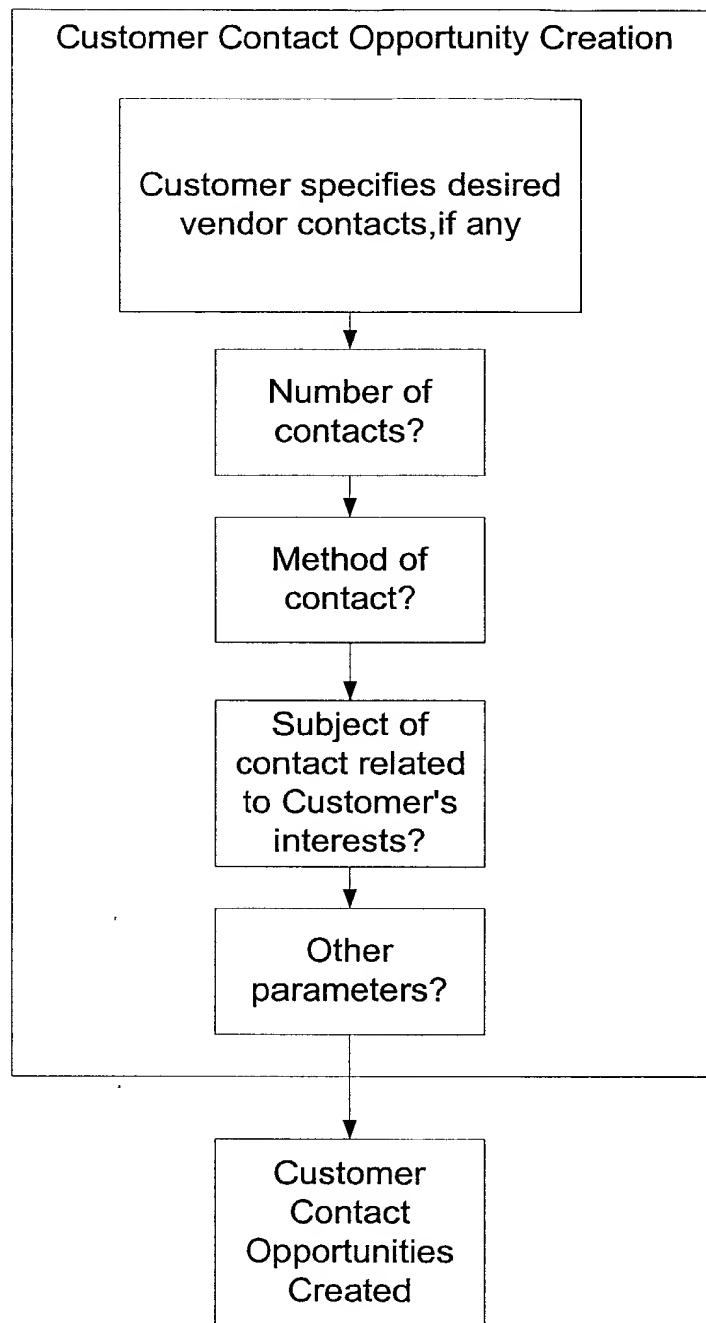
**Fig. 35** AppLink to a Linux Gnome Computer GUI Desktop





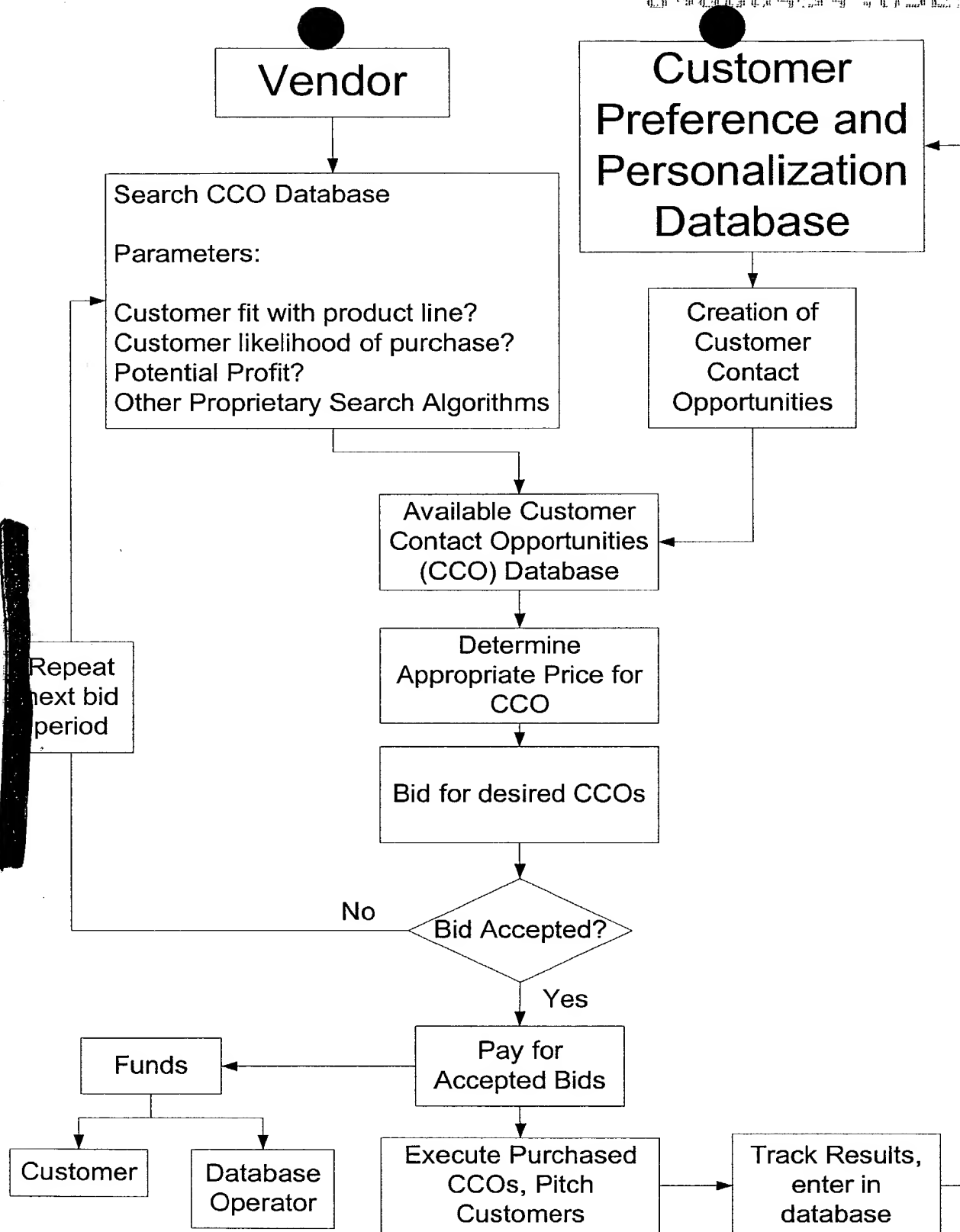
Customer Preference and Personalization Database:  
Provision of Valuable Customer Services as an Incentive to Join

**Fig. 36**



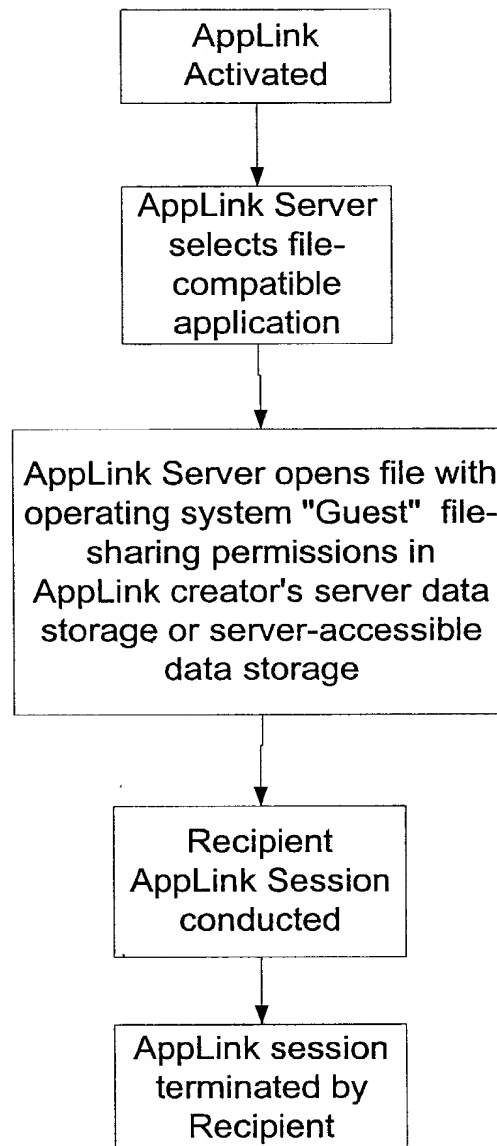
Customer Preference and Personalization Database:  
Creation of Customer Contact Opportunities

**Fig. 37**



Customer Preference and Personalization Database:  
Auction of Customer Contact Opportunities

**Fig. 38**



AppLink File Opened in Sender's Account with "guest" permissions  
(less secure)

**Fig. 39**

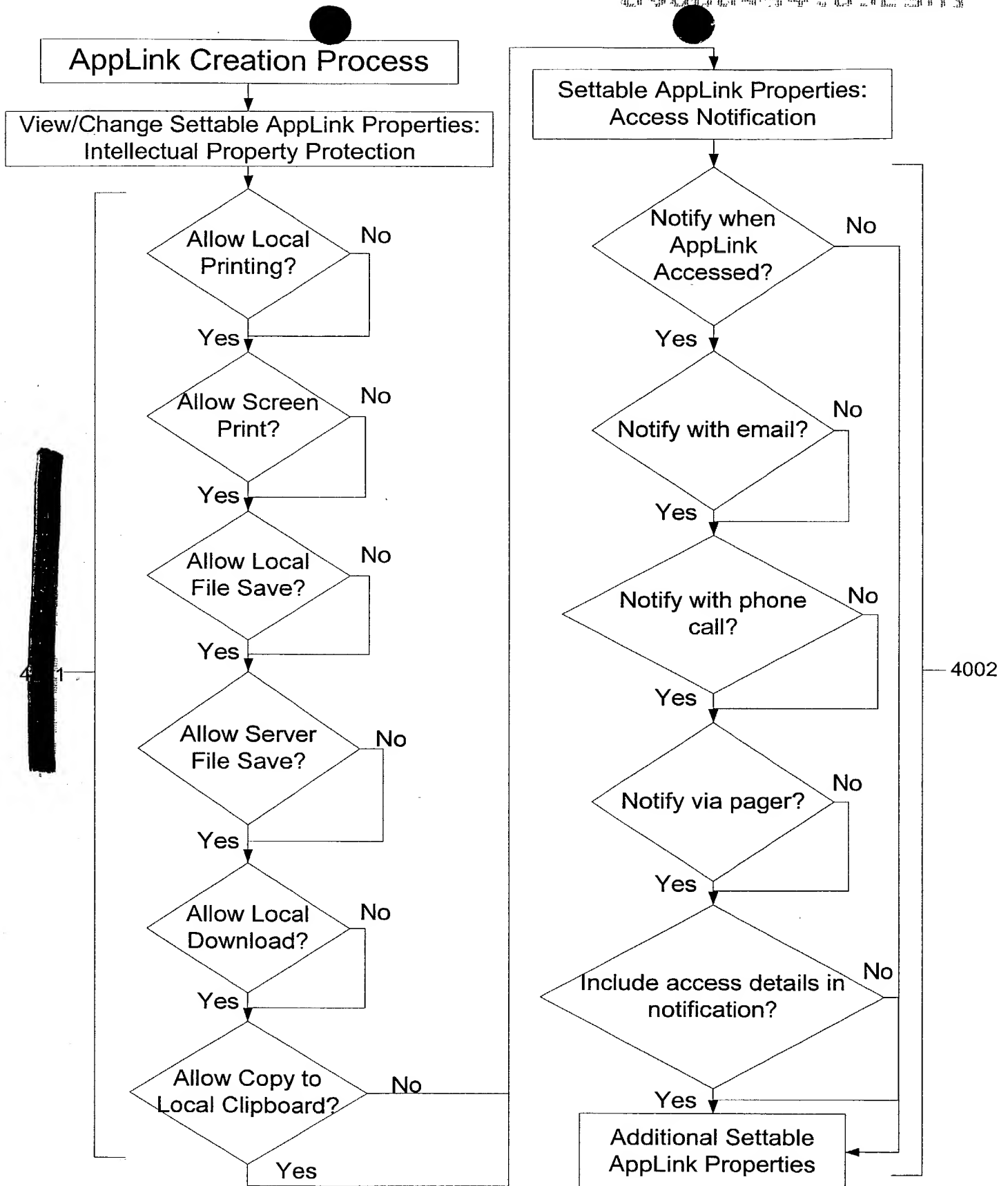


Fig. 40 AppLink Properties: Intellectual Property Protection, Access Notice

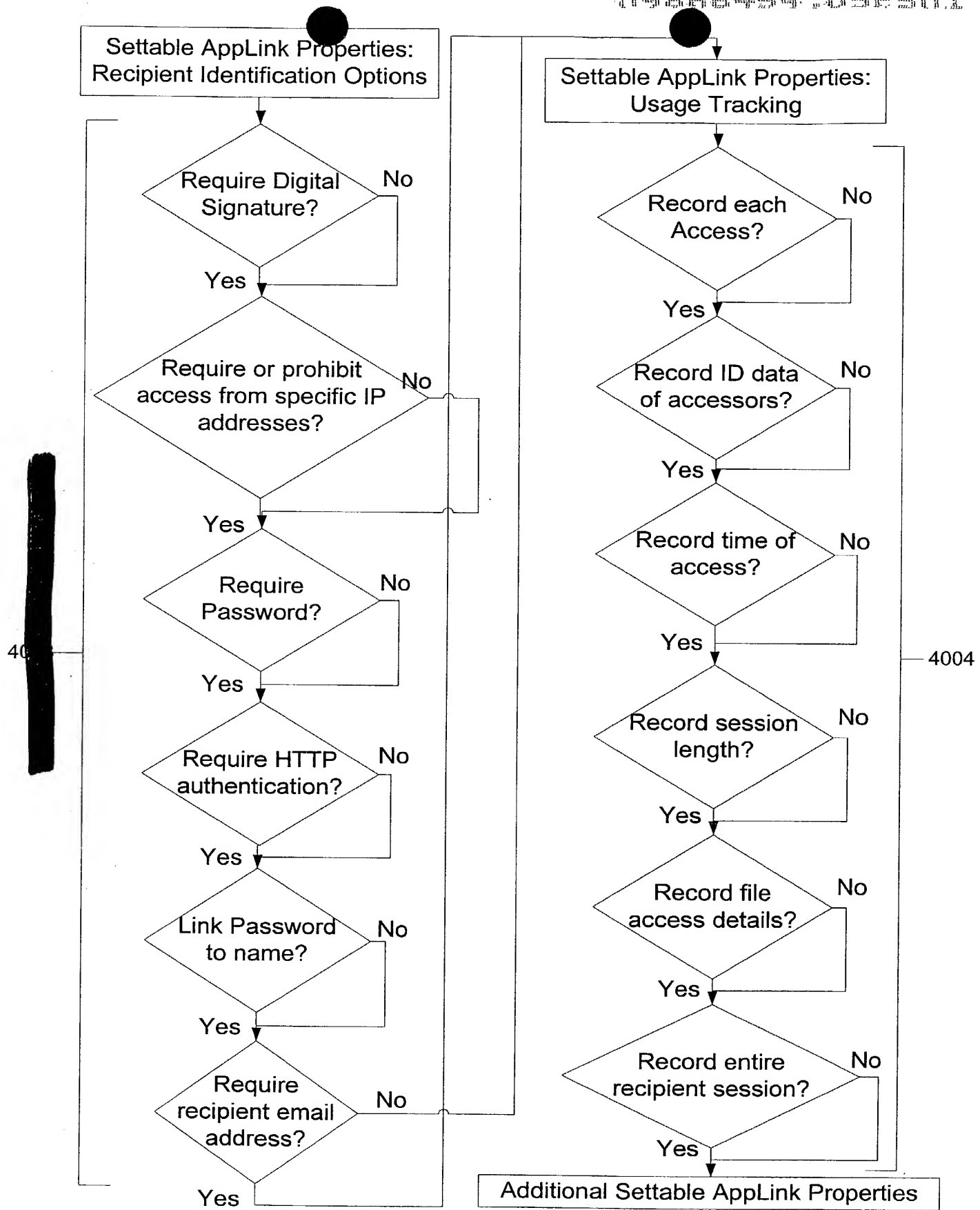


Fig. 40B Variable AppLink Properties: Recipient ID & Usage Tracking

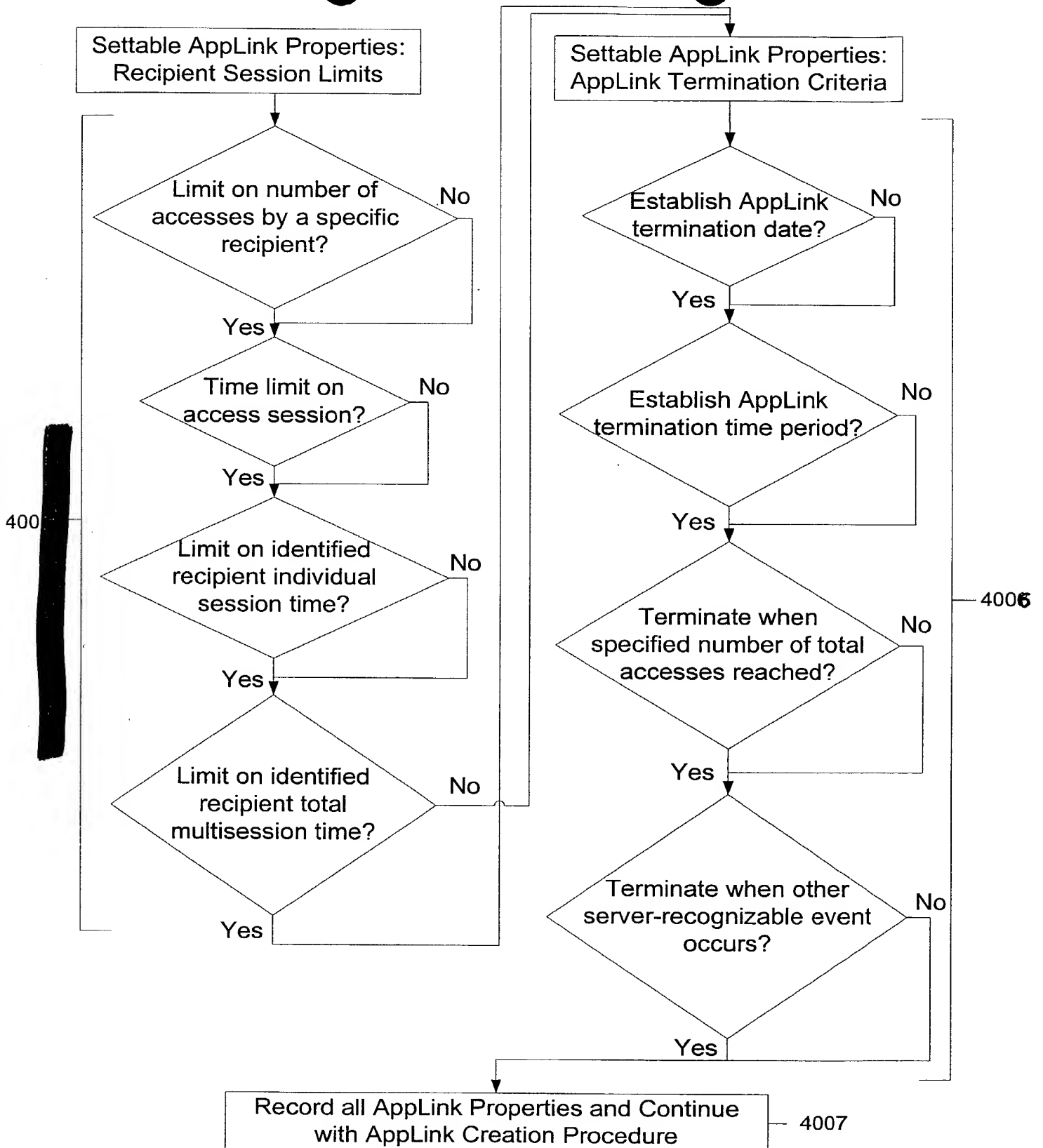
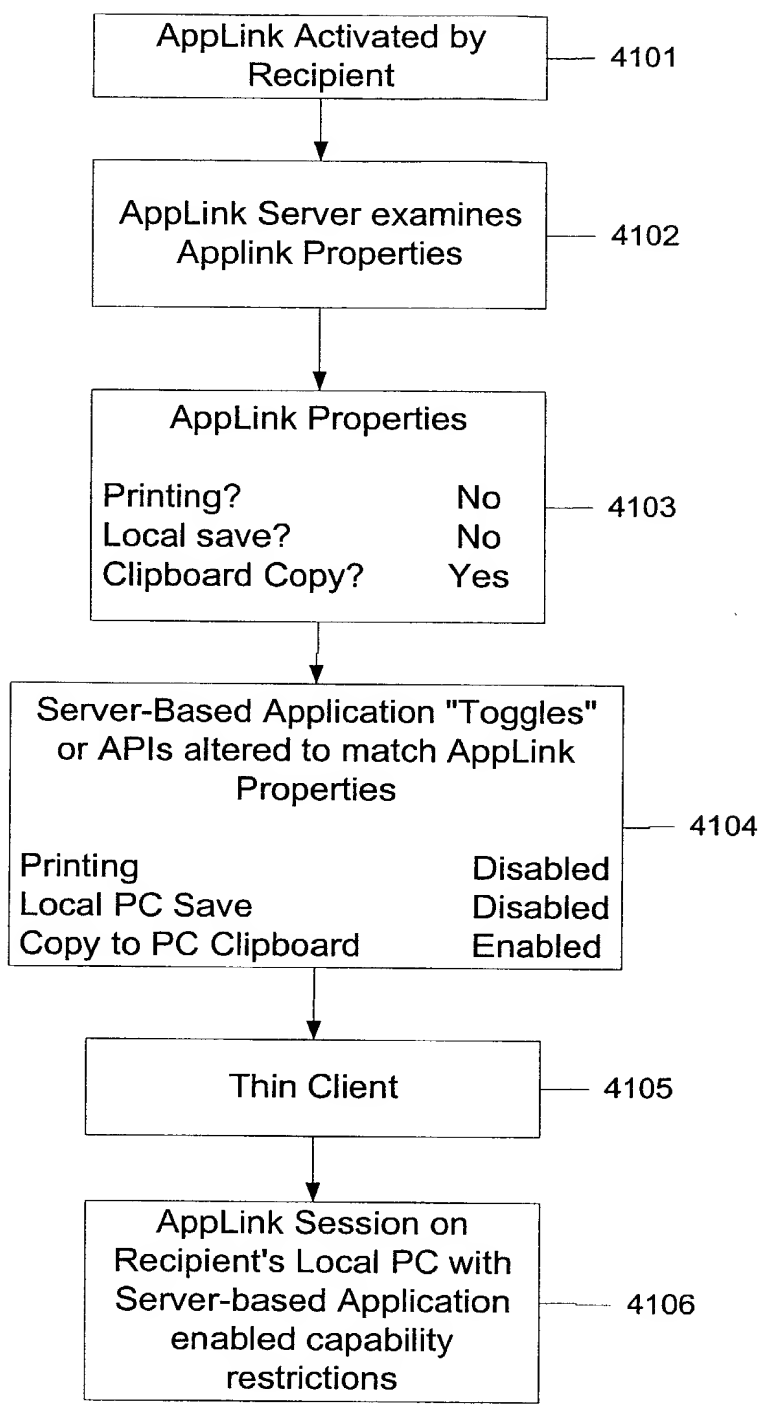


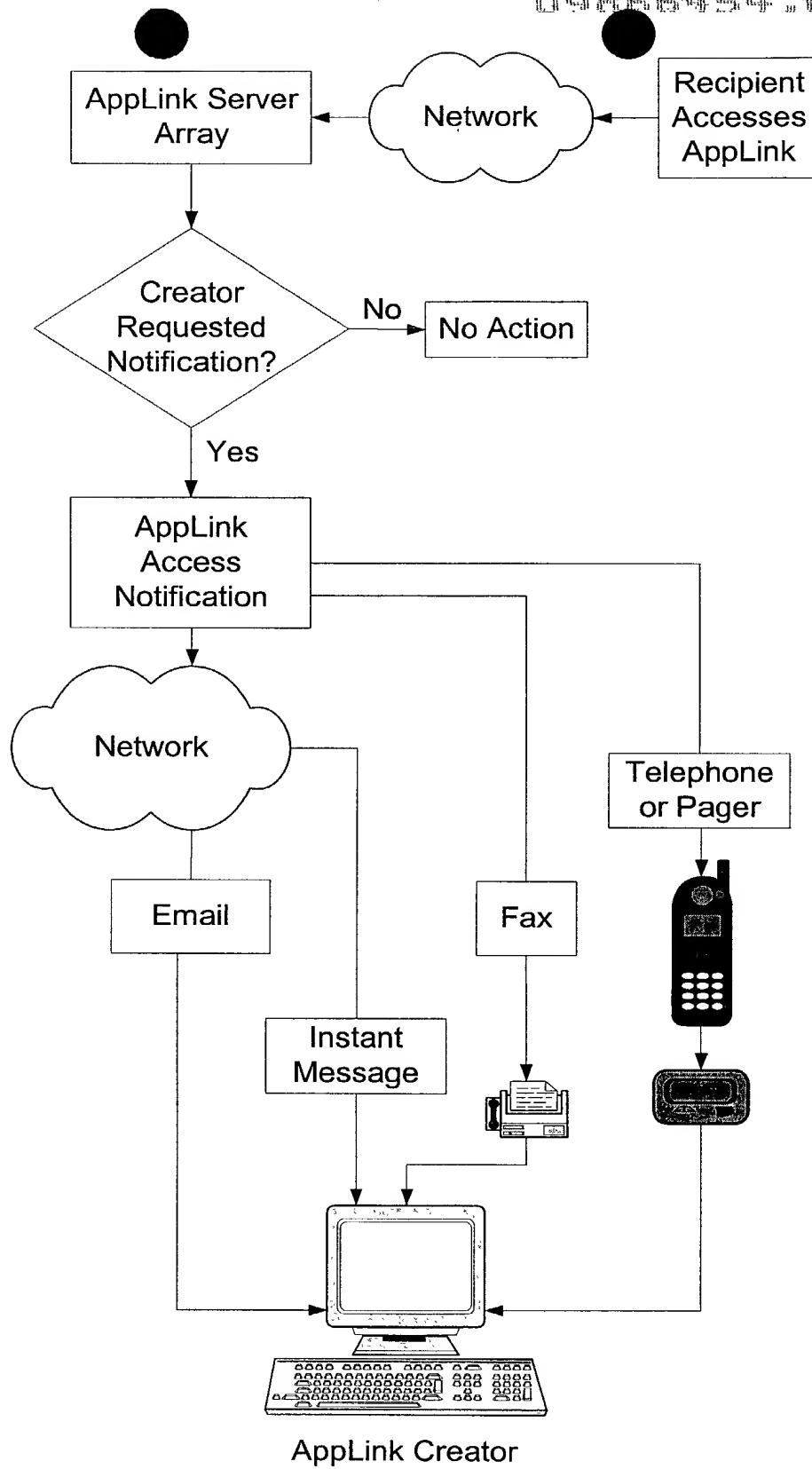
Fig. 40C Variable AppLink Properties: Session Limits, Termination



Settable AppLink Variables through Application "Toggles"

**Fig. 41**

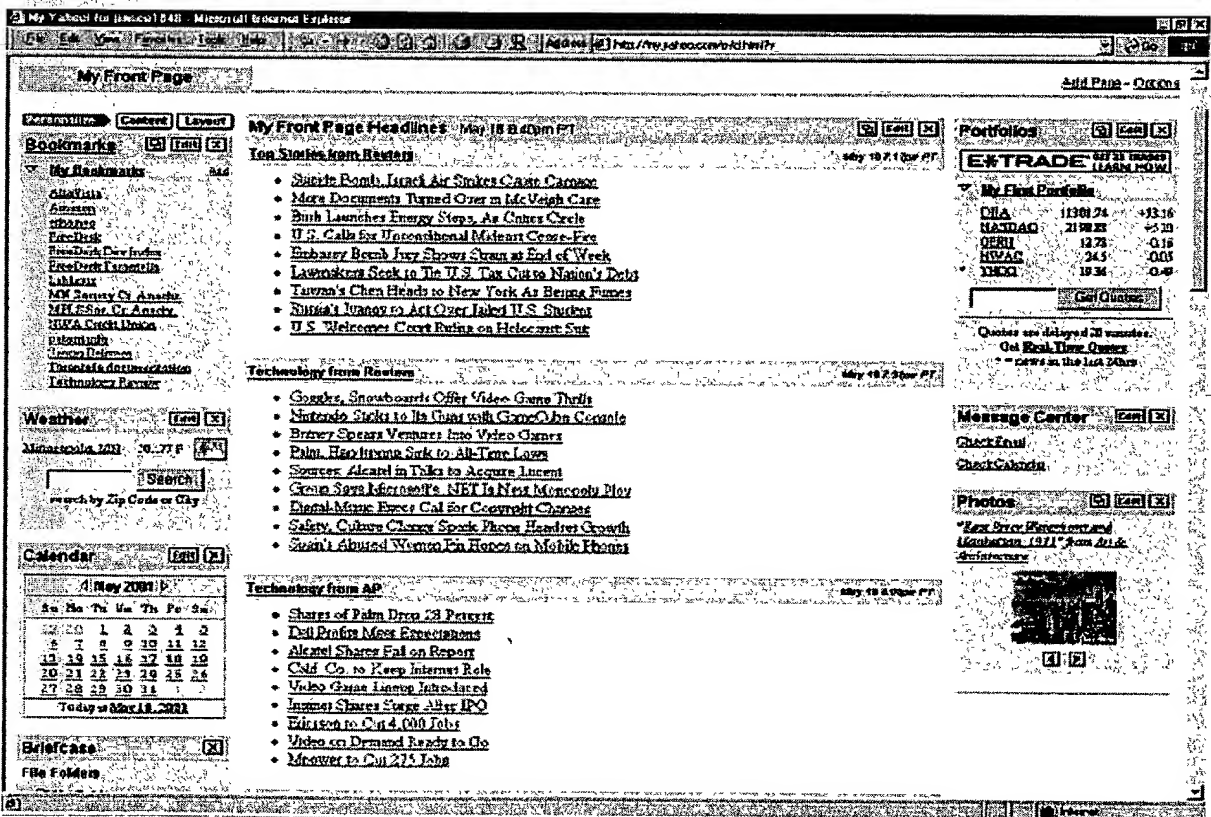




**Fig. 42** Notification to AppLink Creator of AppLink Access



4301



4302

Portal Home Page: HTML and Thin-Client Linux Gnome Desktop  
Fig. 43

4410

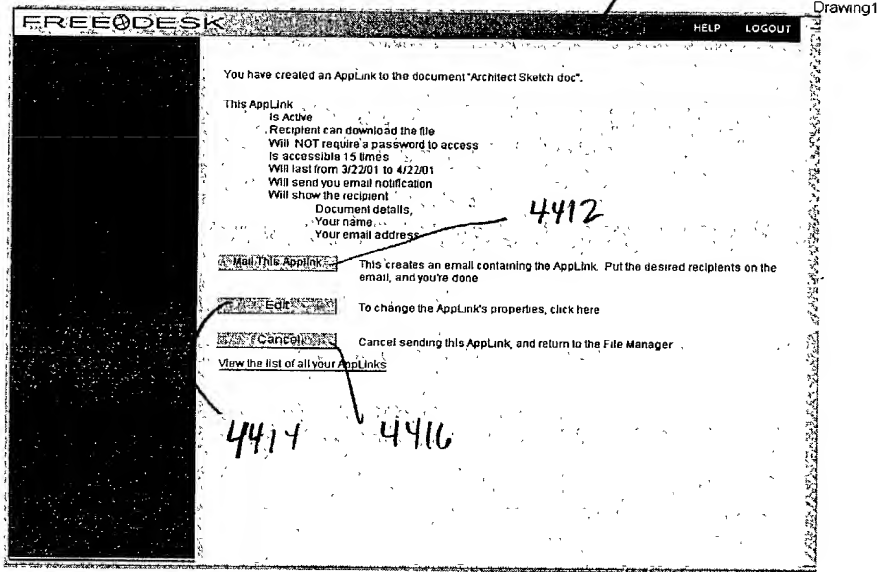


Fig 44

FREEDESK

HELPLOGOUT

You've received an Applink

When you click on the "Open Applink" button, a secure Java program will temporarily download and display your the document

You may also download the document. Do this if the Applink fails to open

Password

Open

Details

Document

Architect Sketch.doc

Size 44.2 MB

Sender

Jim Rice  
jim@freedesk.com

More Information

[What is an Applink?](#)

[Technical Requirements for using Applink](#)

[Instant Networking, Secure Applinking](#) [Learn More about FreeDesk](#)

Fig 45

# AppLink

Sorry! You have clicked on an AppLink that is no longer active. We can't open the file it is linked to

When you click on an AppLink, a small, secure Java Applet client downloads, and a designated file opens on your computer within a program running on our servers

If you would like to see a demonstration of an AppLink, please click on the type of file you would like to see demonstrated, below.

Word Document

Excel Spreadsheet

Powerpoint Presentation

**Join FreeDesk and Send  
Your Own AppLinks**

**Technical  
Requirements**

*Fig 46*

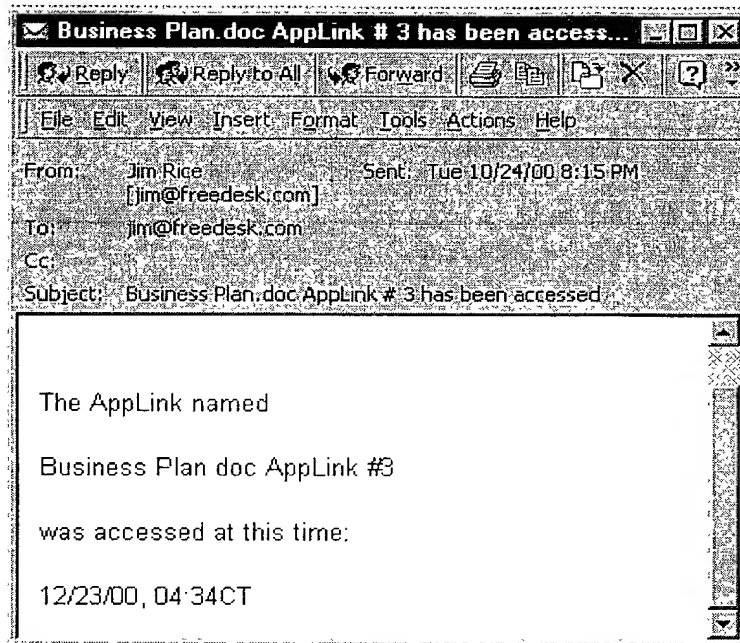


Fig 47

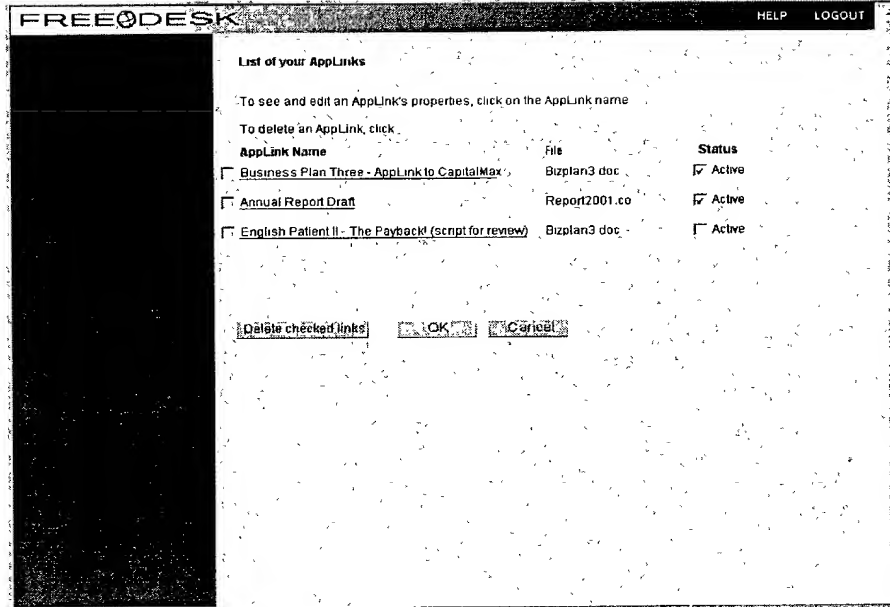


Fig 48

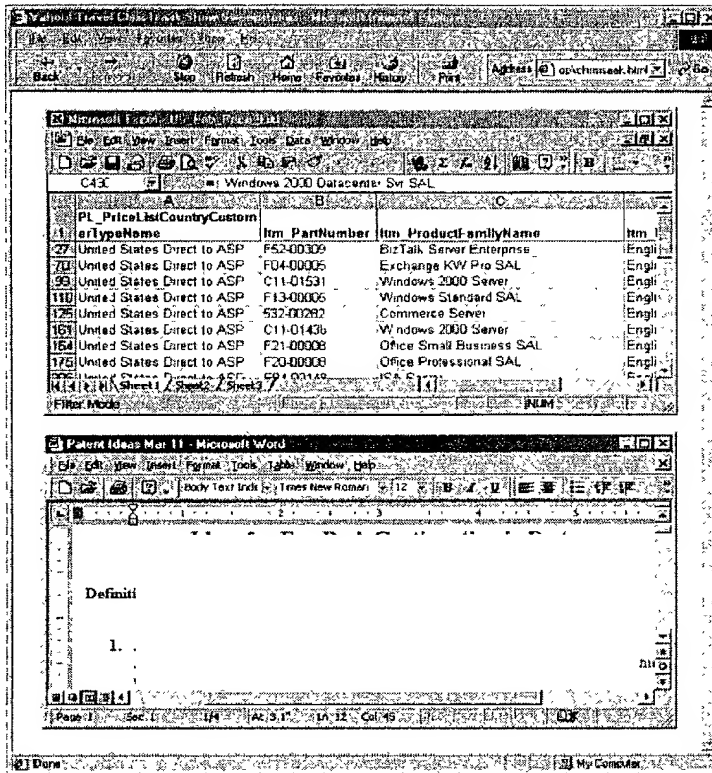


Fig 49